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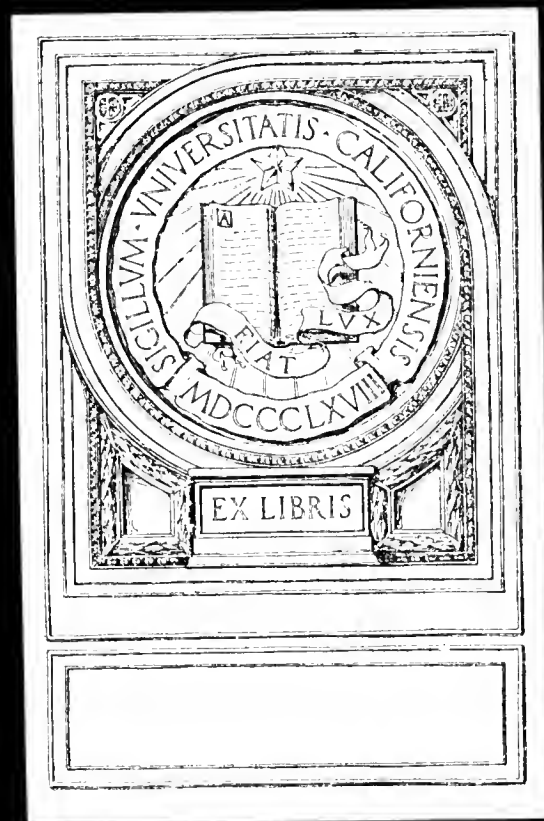
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# DECORATIVE DESIGN

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JOSEPH CUMMINGS CHASE

WILEY TECHNICAL SERIES







THE WILEY TECHNICAL SERIES  
FOR  
VOCATIONAL AND INDUSTRIAL SCHOOLS

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*For full announcement see list following index.*



# DECORATIVE DESIGN





# DECORATIVE DESIGN

A Text-book of Practical Methods

*(Pp. 21-2 mut.)*

BY

JOSEPH CUMMINGS CHASE

Instructor in Decorative Design at the College of the City of New York  
and at the Woman's Art School of Cooper Union

NEW YORK

JOHN WILEY & SONS, INC.

LONDON: CHAPMAN & HALL, LIMITED

1915

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TO WHOM  
APPROPRIATE

THE SCIENTIFIC PRESS  
ROBERT DRUMMOND AND COMPANY  
BROOKLYN, N. Y.

## PREFACE

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THESE notes for the study of design are the result of some years' experience in teaching and designing. They are arranged to treat the subject briefly and directly in order to meet the practical requirements of students. The book does not attempt to cover the subject in its larger aspects, but rather to show the practical working out of many problems.

Materials and books that the writer has found particularly serviceable are designated in the third and fourth sections.

JOSEPH CUMMINGS CHASE.

NEW YORK CITY  
July, 1915.

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# DESIGN

I. OF TWO DIMENSIONS  
(APPLIED, OR DECORATIVE)  
in the creating of which  
are used

A. DECORATIVE MOTIVES  
(FIGURES, OR UNITS)

B. SYSTEMS OF  
ARRANGEMENT

for the  
decorating of

1. UNLIMITED  
AREAS

“All-over” patterns,  
surface patterns, and  
“repeats” are the  
synonymous terms  
designating the kind  
of patterns used for  
an unlimited area.

They are composed  
of:

- (a) Single units,
- (b) Groups of units,
- (c) Continuous  
growth.

2. LIMITED  
AREAS

a. THE BORDER

b. INCLOSED  
AREA  
(space within  
the border)

c. LETTERING

II. OF THREE DIMENSIONS (CONSTRUCTIVE).



# DECORATIVE DESIGN

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## SECTION I

1. **There are two kinds of design:** That of two dimensions, known as applied or decorative, and that of three dimensions, commonly called constructive. The second has to do with the manufacture of objects involving length, breadth, and thickness, such as buildings, furniture, and utensils of all kinds. This book treats in no way of constructive design. It is concerned entirely with the study of design of two dimensions, **applied** or **decorative**. This study, especially as pertaining to the enrichment of surfaces, adds immeasurably to our perception of beauty in form, color, and texture.

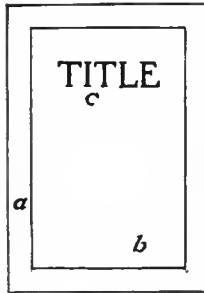
2. The creating of patterns for the enrichment of surfaces demands, first, the invention of a suitable **decorative motive** (also called figure, or unit), and second, the selection of that **system of arrangement** which will govern and facilitate the use of this motive.

3. Designs for **unlimited areas**, such as wall papers, carpets, linoleums, fabrics for upholstery, and dress goods, necessitate the use of "all-over" patterns (also called surface-patterns or "repeats"). These designs are composed of (a) single units, (b) groups of units, or (c) continuous growth. (See page 10.)

4. Designs for **limited areas**, such as book-covers, title-pages, posters, advertisements, rugs, require the consideration of (a) the border, (b) the inclosed area which is the space surrounded by the border, and (c) lettering, if lettering is to be included in the design.

**The border** may be made up of abstract forms or forms conventionalized from nature. It is frequently a plain line only, or a plain space between two lines. Additional lines of varying widths and the interlacing or interruption of these lines at the corners or middle of the

sides may give greater interest. Abstract block forms (see page 7) in repetition or alternation may be used. So also may conventional forms. The curves upon which borders of flower-forms are often constructed are called the "C" and "S" curves, or the simple and compound; and the beauty of the curve, simple or compound, used as the backbone of the border-pattern, should be emphasized. If it is not so emphasized, the design is in danger of appearing confused; and the effect of **order** so necessary to every good design is lost.



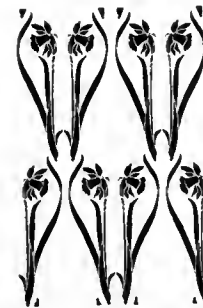
The **inclosed area** is the space or panel which the border surrounds. If the border decoration be important in effect, the inclosed area may need no decoration. A vertical center axis may

be the backbone of a design growing to the left and right, or the decoration may begin at the corners, or at the middle of the sides, and develop inward toward the center. A single decorative unit is frequently most effective when placed somewhat higher than the center.

**Lettering**, if dignified and properly placed and spaced, may be depended upon to give a feeling of style to a design of even doubtful merit. Carefully planned masses of letters play a very important part in practical design. The designer must recognize how important it is to use a



(a) Units placed in vertical rows.



(b) Units placed in horizontal rows.



(c) Units placed in oblique rows.

style of lettering in keeping with the character of the rest of his design. The slightest lack of attention in the making of letters will mar the whole effect. Our own alphabet as used in the printing of this book is the "Roman" alphabet. The proportions of its letters have undergone various experiments, but those now in general use are the result of the survival of the fittest (see page 30).

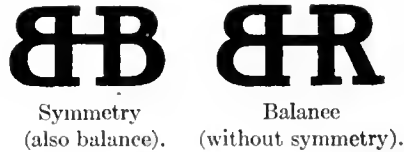
5. The simplest units are often the most effective. "The beauty of a surface-pattern depends more upon the rhythm of the units over the surface than upon the form of the units themselves." It is evident, then, that the systems of creating rhythm by orderly arrangement should be clearly understood.

6. The simple systems of "repeat" refer to the making of "all-over" patterns for unlimited areas. They are (a) placing units in vertical rows, (b) placing units in horizontal rows, (c) placing units in oblique rows.



7. The well-known experiment of writing one's autograph with ink upon paper and folding it while wet so as to repeat the exact form reversed is a good illustration of **symmetry**. Plant growth shows innumerable examples.

All designs which are symmetrical are balanced, but not all balanced designs are symmetrical, as is shown in the



accompanying illustrations of the monogram BHR and the cipher HTS. Symmetry means likesidedness.

Symmetry gives the effect of formality whether in the façade of an example of monumental architecture or in a tiny flower-motive.



An interior, showing symmetry, designed by E. Williams.



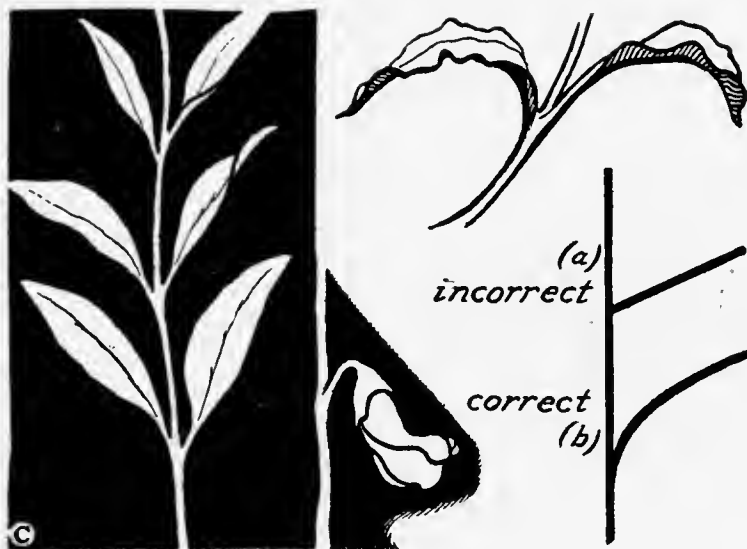
Symmetry  
(also balance).



Cipher showing  
balance  
(without symmetry).



Blotted autograph illustrating symmetry.



(a) Tangential junction.

8. **Tangential junction** is clearly shown in the plant growth pictured above (a). The lines that form a junction should be, in so far as possible, tangential to each other. There are exceptions to this rule, but it is a safe one to follow.

9. The vertical growth of a plant may show **radiation** from a point (b) or from a vertical line (c). The top



(b) Radiation from a point.

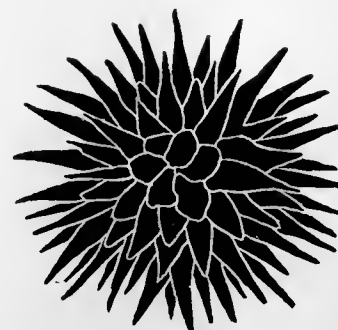
view of a plant suggests horizontal radiation about a point (d). Motives with horizontal radiation about a point are particularly adapted to the decorating of horizontal surfaces such as floors and ceilings, while motives with vertical radiation are adapted to the decorating of vertical surfaces.



(c) Radiation from a line.



(d) Horizontal radiation about a point.



To utilize plant-growth and other natural forms properly for decorating given spaces or surfaces, it is necessary to employ a process called **conventionalization**.

**10. Conventionalization** consists in keeping the general characteristics of a natural form, and omitting small details and accidents of growth, as the method of applying the design may require. It usually includes emphasis upon the geometric basis underlying natural forms.

It is probable that conventionalization originated in the limitations imposed by the material used.

Conventionalization is of two kinds, (a) **formal** and (b) **informal**. Broadly speaking,



(b) An example of informal conventionalization.



(a) Three examples of formal conventionalization.

it is *formal* when purely decorative shapes and arrangements are developed *without* perspective appearance, even though natural form and growth be taken as a guide (a). It is *informal* when purely decorative shapes and

arrangements are developed *with* perspective appearance (b). It is called informal even though small details are rejected.

Study of this subject gives an appreciation of conventionalized ornament and more or less ability to produce it.

**11. Surface enrichment** may be achieved with conventionalized ornament: (a) **abstract forms** and (b) **forms conventionalized from nature**.

Shapes not derived from natural growth are abstract shapes. These are obtained chiefly from geometry. The finest historic decorations have been based upon the laws of geometry.

Forms conventionalized from nature include not only those derived from plants and flowers and from insects and other animal life, but also those not so generally appreciated, derived from the curling of smoke, whirling of water, markings of wood and stone, and the simple lines of landscape. All these can be adapted to decorative uses by the elimination of details, by simplification, and by revision.



(c) A form conventionalized from Nature.



(d) An abstract form.

Formal and informal conventionalizations of flower-forms should not both appear in the same design. Whether formal or informal they should plainly show that the intention is ornament, not the representation of a plant.

12. Abstract shapes, as well as forms conventionalized from nature, when applied to surface enrichment are governed by certain **forms of order**. Writers upon design differ as to the relative importance and as to the number of the "forms," or "rules." Three may be considered fundamental: Harmony, balance and rhythm.

**Harmony** is the just adaptation of parts to one another.

**Balance** is an equalization of weight. (See page 5.)

**Rhythm** is a measured repetition of accents.

To these three "forms" of order, we will add two others: Dominance and subordination.

**Dominance** is the effect of superior importance.

**Subordination** is the effect of inferior importance.

Dominance and subordination are not always specified in the "forms of order," but, because they are great factors in the successful making of commercial designs, they are here included. They prevent monotony and give strength.

"Harmony is a broader term than either rhythm or balance; it may, in fact, involve one or the other, or both, of these terms. It consists in shunning differences too pronounced, contrasts too startling; in giving to the various elements of a design something in common. Uniform-

ity of details, tone, measure, and shape, might be defined as perfect harmony. But uniformity is assuredly not the most pleasing manifestation of harmony. The eye craves contrast, variety; how far to go, where to stop, is the problem of the designer."—BATCHELDER.

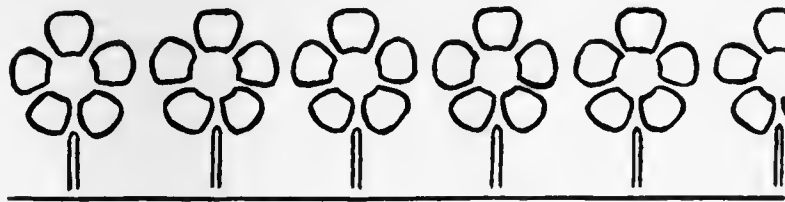
The above quotation aptly indicates the impossibility of entirely separating any one of the so-called "forms" or "rules" of order from the others. The more we contemplate any one of them the more we find that particular "form" to be involved in a number of other "forms." However, there are certain definite principles pertaining to orderly arrangement in decorative design that, for the sake of study, may be classified as follows: **Repetition, alternation, contrast and variety**. (See next page.)

13. Decorative or applied design must not detract from the usefulness of the object to which it is applied. It should give added use, or added beauty, or both.

In the making of designs for a specific purpose, we must consider carefully the use to which the thing decorated is to be put. The fact that a rose-motive is of itself excellent and entirely in good taste as a decorative unit for wall paper, does not guarantee its fitness as a decoration for a cooking utensil. The forethought this involves we call the consideration of **fitness to purpose**.

The choice and development of the decorative motive

FOUR SO-CALLED "PRINCIPLES OF DESIGN" PERTAINING TO ORDERLY ARRANGEMENT



Repetition.



Alternation.



Contrast.



Variety (with contrast).



Repetition, contrast, and variety.

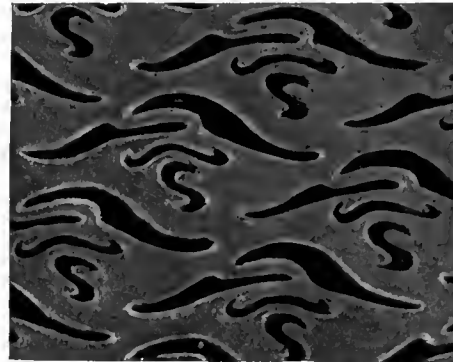
for a given surface must be subject to the limitations of the medium to be used (pencil, crayon, ink, water color, or oil color). The nature of the material to which the design is to be applied, and the manner of applying the design, must be taken into account. For example, a stencil, or "cut-out" pattern, requires a much simpler treatment in

however, is like strong drink; it must not be used intemperately. Color-contrast is particularly useful for posters, for all advertisements in fact, and for covers of news-stand books and periodicals that must compete with others in attracting the eye of purchasers.

On the other hand, in making designs for surfaces that



a



b



c

Three wall paper designs by E. Williams showing all-over patterns composed of (a) single units, (b) groups of units, (c) continuous growth. (a) and (c) are examples of forms conventionalized from nature. (b) is an example of abstract forms.

mass-forms, more free from minutiae, than a design that is to be traced.

In making designs for surfaces that are intended to attract the eye as well as to appear beautiful, an understanding of **color-contrast** and emphatic spotting of a form or forms is of the greatest importance. Color-contrast,

are intended to be beautiful rather than striking, **color-harmony** and quiet, dignified arrangement of the motives, producing an effect of repose and "live-with-ableness," are absolutely essential. This is the case with wall-papers, ceiling decorations, rugs, fabrics, and book-covers intended for the library table rather than for the news-stand.

## SECTION II

### THE SOURCES OF CONVENTIONALIZED MOTIVES

14. Many students tend simply to copy natural forms without exercising the power of invention. This literal imitating does not make successful decoration. The experienced designer has certain calculated ways of arriving at good motives suitable for the working out of any problem. He is able to adjust, to arrange, to modify, until his problem of surface-covering or space-filling is fittingly solved. This process in each problem involves a careful consideration and development of the peculiarities of shape and natural growth. In the course of this consideration and development, the designer, by simplifications and combinations, invents fresh and individual expressions of his art.

Explanations of the theory of conventionalization, even when illustrated by many beautiful examples, seldom suffice to give the student the help he needs. Appreciation of conventionalized ornament may be aroused; but the more exquisite the examples shown the more helpless in the face of their seeming intricacy the student feels.

There are many excellent books on design, the most of which show a bewildering number of choice motives;

but *how* the designer arrived at those motives, the student is at a loss to know. Consequently, although such books are of great interest to the professional designer and to the advanced student, they are mystifying to the student who is only beginning his design-problems.

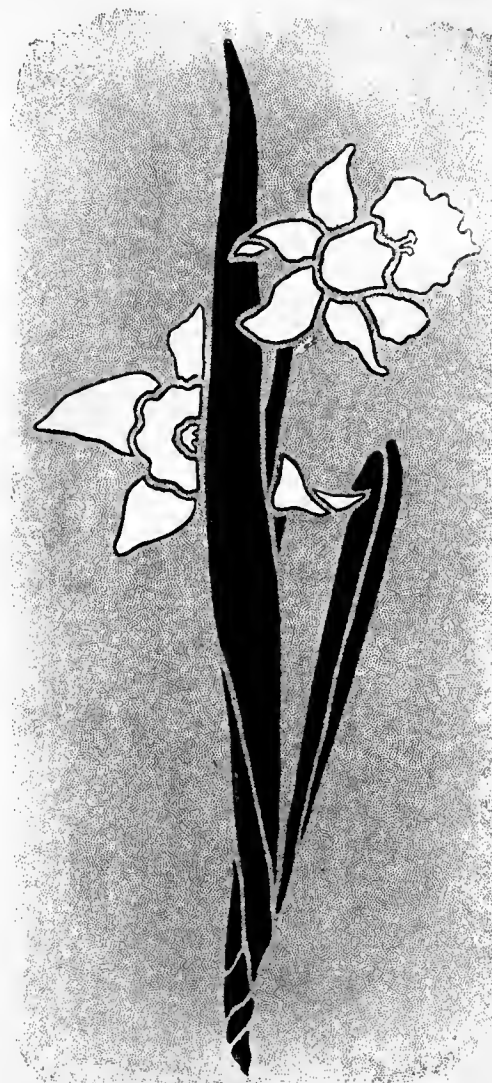
15. The accompanying flower-plates, and those of insects, animals and landscapes, show a series of steps by which the designer arrived at certain conventionalizations adapted to various uses in decorative design. Included are some plates made without assistance by first-year students who followed the same scheme of progression.

Detailed drawings made from living plants and flowers are especially valuable as a source of design motives. But obviously it is not always possible for the student, or even for the professional designer, to get these. Photographs from books of reference pertaining to plant and flower growth, insect and animal life, will be found very helpful. The photographs used as the base of steps in the accompanying flower-plates were selected from easily obtained flower and seed catalogues.

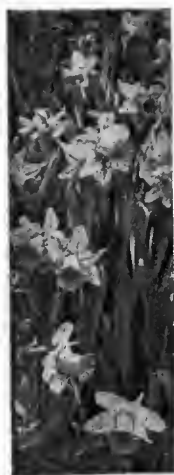
# FLOWERS AS A SOURCE OF CONVENTIONALIZED MOTIVES (THE DAFFODIL)



First step



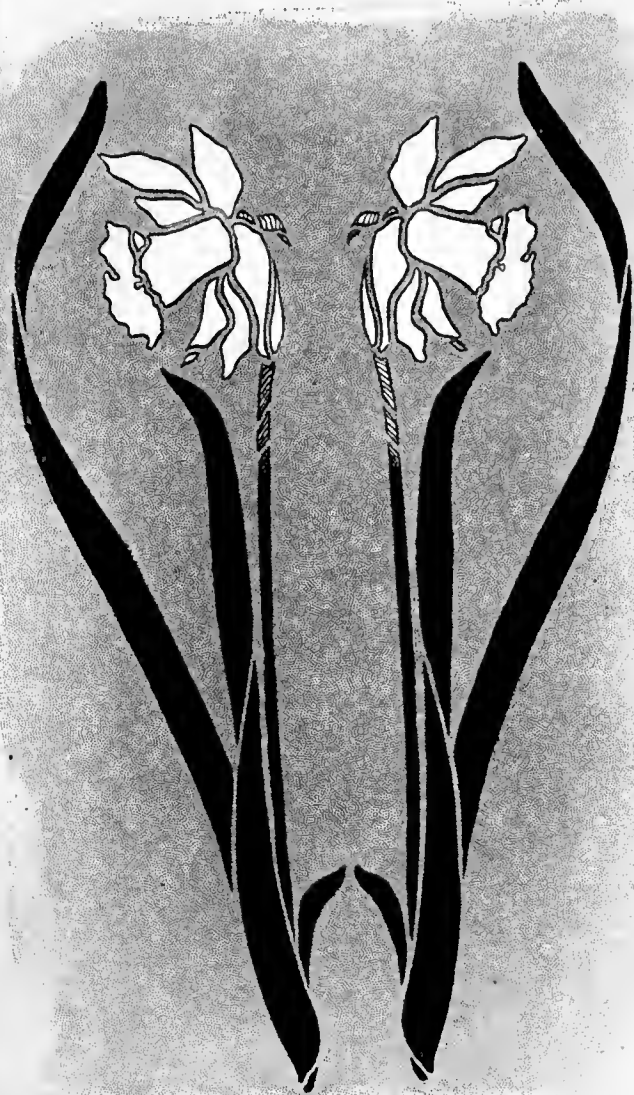
Second step



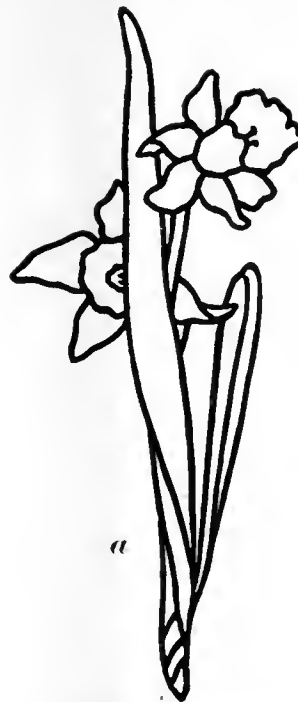
First step: Making a careful outline drawing. Second step: Creating an informal ornament with shapes selected from the first step.



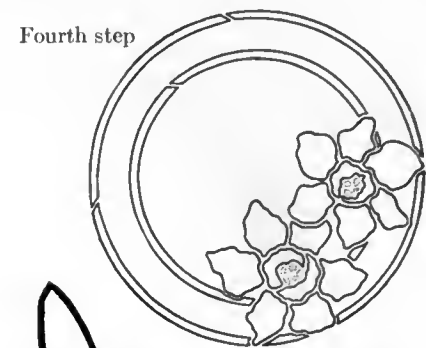
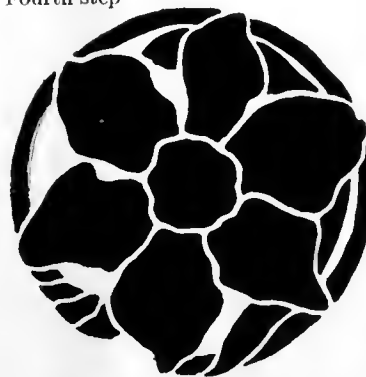
# FLOWERS AS A SOURCE OF CONVENTIONALIZED MOTIVES (THE DAFFODIL)



Third step



Fourth step



Fourth step



Another example of second step

Third step: Making a bilateral or "twin" unit for an all-over pattern. Fourth step: Space-filling. (a) shows the second step with its "canals" filled in, producing a poster outline.

# FLOWERS AS A SOURCE OF CONVENTIONALIZED MOTIVES (THE ROSE)



First step



Second step

16. The **first step** (see page 12) is merely an outline drawing made from the photograph. The tendency in making an outline sketch is to strive for an "artistic" effect, which usually results in a fuzzy roughness. Such a sketch is of no help at all to the designer. He must have a carefully considered outline of each of the many shapes contained in the photograph of flower, leaf, and stem. To insure such a consideration by the student it is well, in the developing of conventionalized motives from flowers and insects, to separate each particle or segment from the others. The outline drawing will then resemble a stencil



Third step (two examples). Notice particularly the contour of the inclosed background spacers.



First step: Making a careful outline drawing. Second step: Creating an informal ornament with shapes selected from the first step. Third step: Making a bilateral or "twin" unit for an all-over pattern.

# FLOWERS AS A SOURCE OF CONVENTIONALIZED MOTIVES (THE ROSE)

because of the little narrow "canals" that surround each shape and separate it from the others. When these canals are used they should be kept of a consistent width.\*

17. In the **second step**, it is then possible to make a really artistic arrangement by selecting from the first step the most attractive segments, simplifying, adjusting, combining, but always preserving the *type* of the flower, leaf and stem. The second step, then, is not necessarily

\* These canals, open or filled, are seldom used in landscape, and are of little use in developing conventionalized motives from animal forms.



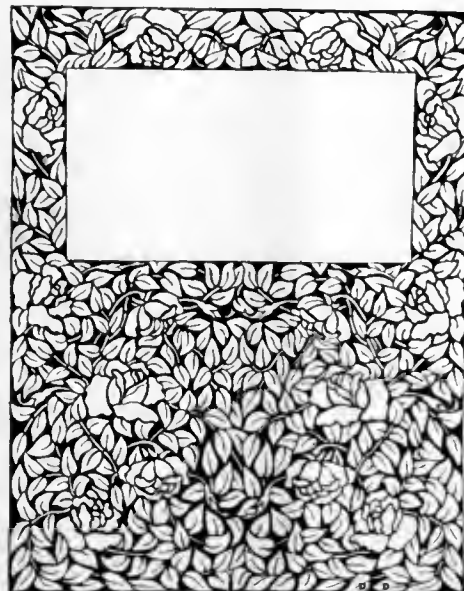
Fourth step  
(six examples).



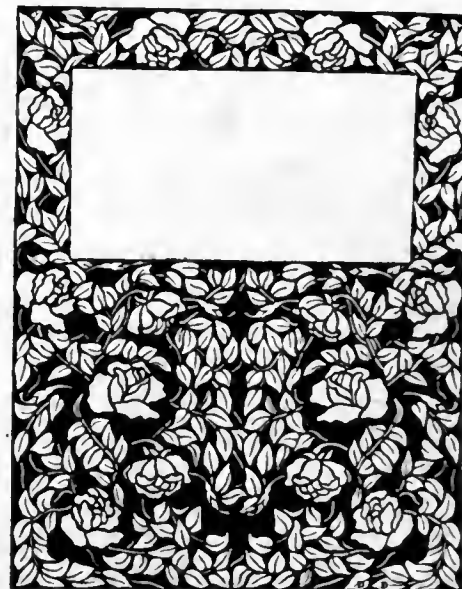
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Fourth step: Space-filling.

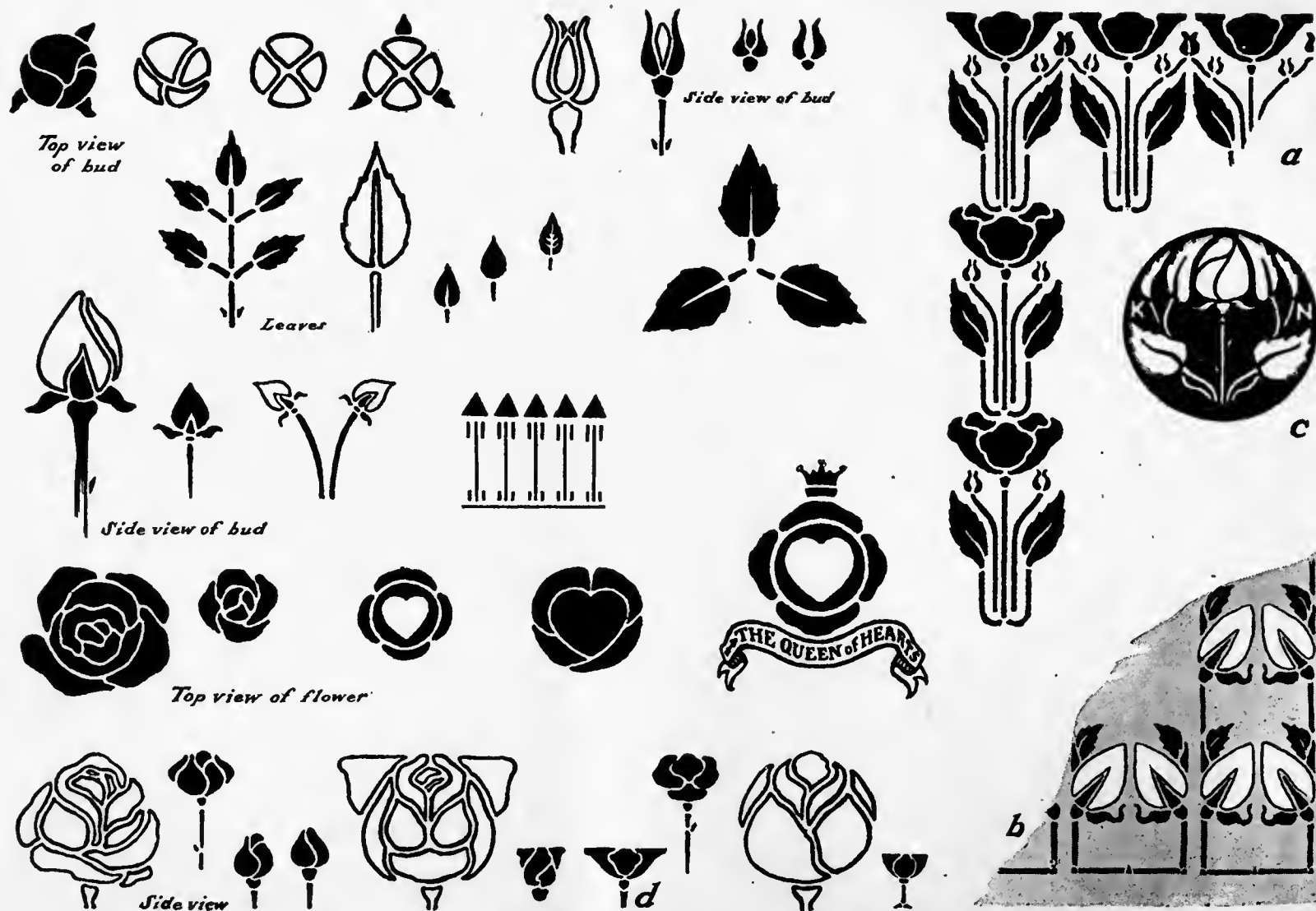


Title page made by first-year student—  
before criticism.



The same title page after criticism.

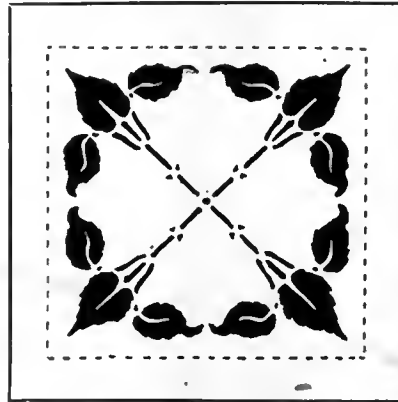
FLOWERS AS A SOURCE OF CONVENTIONALIZED MOTIVES (THE ROSE) SHOWING FORMAL CONVENTIONALIZATION



(a) Design for hangings makes use of the motive (d). (c) is a trademark for the Kitson Nurseries.

a conventionalization; but it must be an ornament as artistic as the student is capable of producing.

18. The **third step** is an invention—a bilateral or “twin” unit. These units are used in “all-over” patterns for unlimited areas, such as wall papers, and upholsteries and other textiles. This third step is necessarily a conventionalization. The fact that such a unit will be repeated many times in the pattern requires that the unit be simple and well contained within itself; otherwise it will look sprawling and uncontrolled.



Rose leaf pattern.

*The contour of background spaces contained within the unit and of background spaces formed by the juxtaposition of the units in the “repeat” is as important as the shapes of the units themselves.*

Every part of the motive should be clean cut and firm. The use of the canals is by no means essential to the production of a decorative motive, as is shown by examples of designs on pages 10, 20, 46, 72, but it will be found helpful, particularly in elementary work. If a stencil is to be made

for transferring the unit, the canals have allowed for the stencil cutting. Or, if a poster-outline is to be used, as in so many examples from the Japanese, the canals are exactly in the position of the intended outline and need only to be filled with the outline color. This will avert the disaster of obliterating any of the smaller segments of the design by the overlapping of the heavy outlines.



Manner of applying a simple stencil.

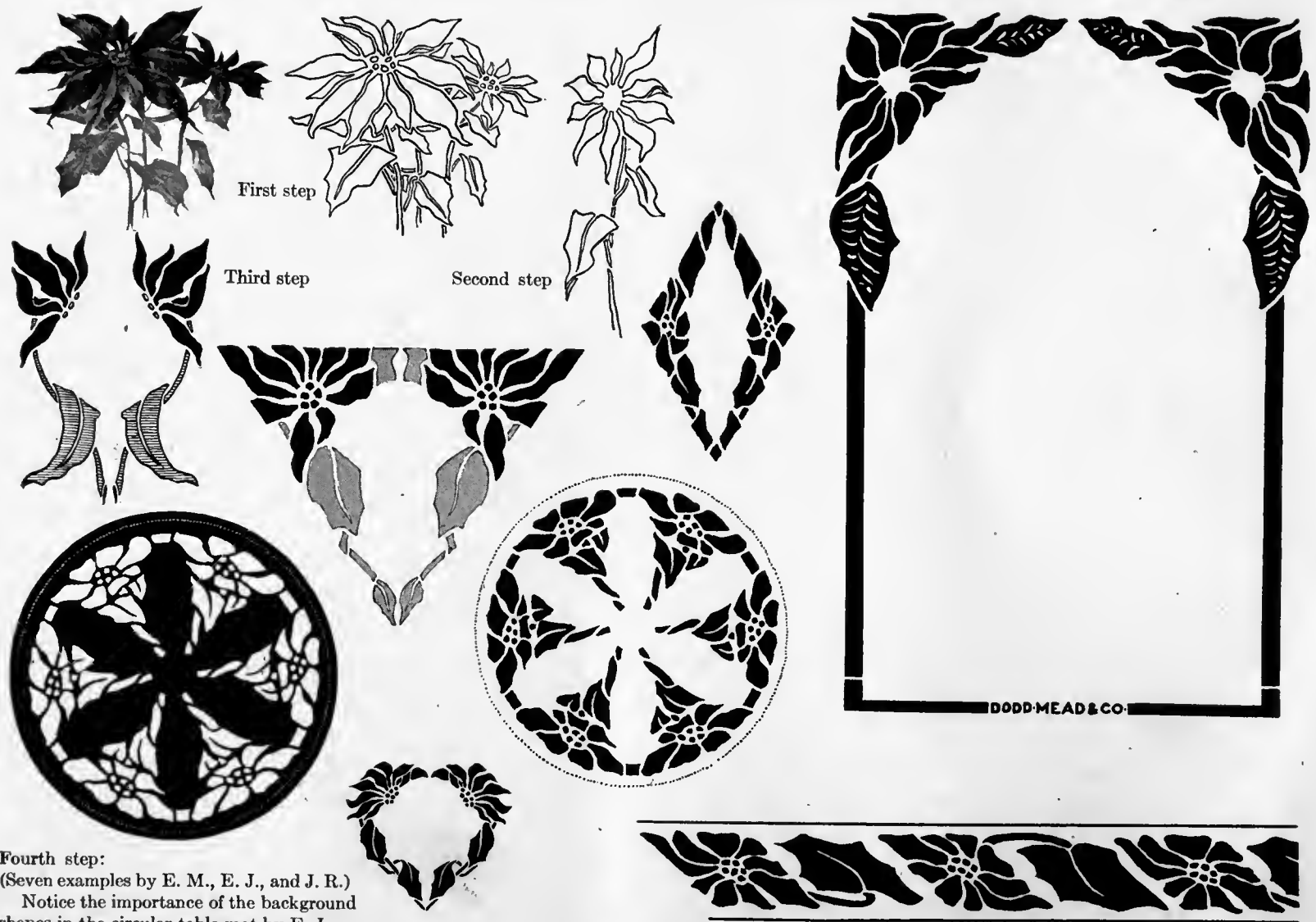
19. The **fourth step** is a decoration for any given area—circle, ellipse, oval, heart shape, rectangle, triangle, diamond, kite shape, or vase form. This is called **space-filling**. Under this head come title-pages, head-

ings and tail-pieces, initial letters, trade-marks, book plates, some kinds of book-covers, book-rack ends, borders, table mats, tiles.

The competent designer must have the ability to decorate any given space-shape with properly balanced or symmetrical design.

Backgrounds may, of course, be treated in many ways other than by plain tones of black, or white, or color.

FLOWERS AS A SOURCE OF CONVENTIONALIZED MOTIVES (THE POINSETTIA) WORK OF FIRST-YEAR STUDENTS



Fourth step:

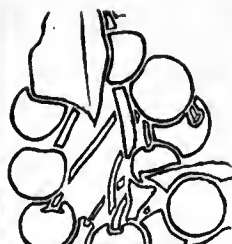
(Seven examples by E. M., E. J., and J. R.)

Notice the importance of the background shapes in the circular table-mat by E. J.

First step: Making a careful outline drawing. Second step: Creating an informal ornament with shapes selected from the first step. Third step: Making a bilateral or "twin" unit for an all-over pattern. Fourth step: Space-filling.



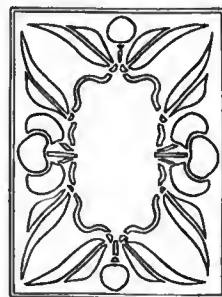
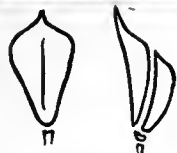
FRUIT AS A SOURCE OF CONVENTIONALIZED MOTIVES (THE CHERRY) WORK OF FIRST-YEAR STUDENT, S.S.



First step



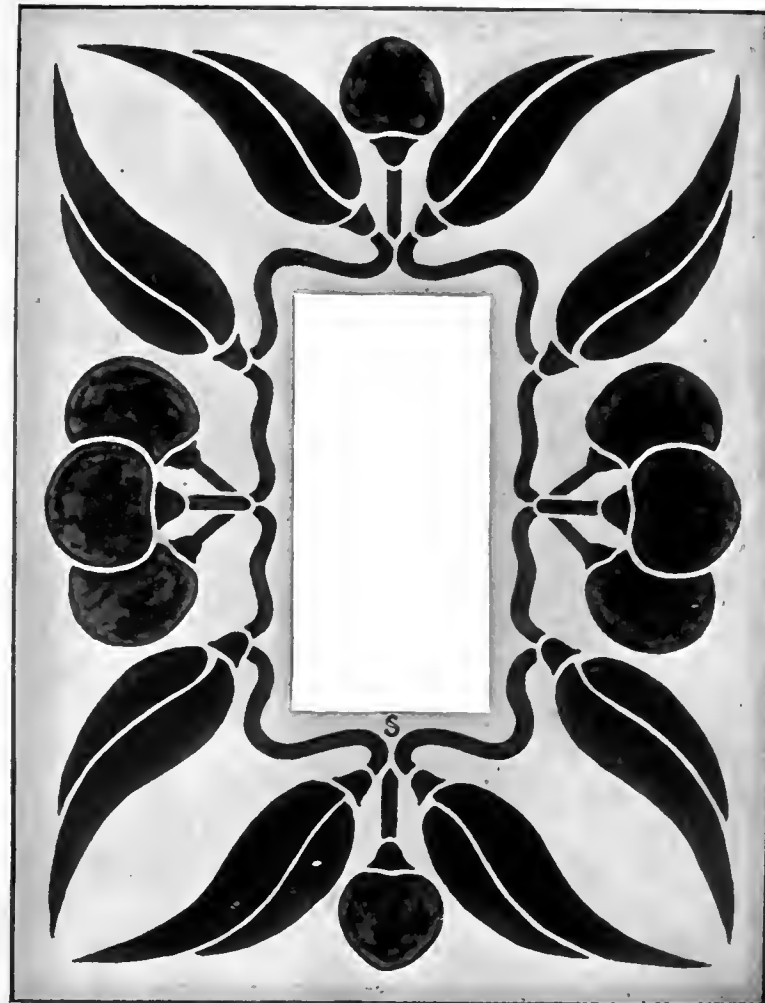
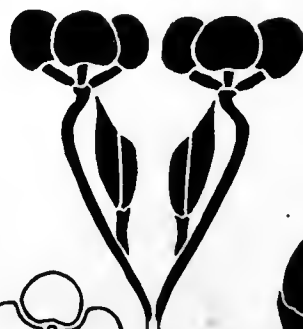
Second step



Fourth step  
(three examples)



Third step



Title-page enlarged and developed in color from the fourth step scheme.  
Black and red upon gray.

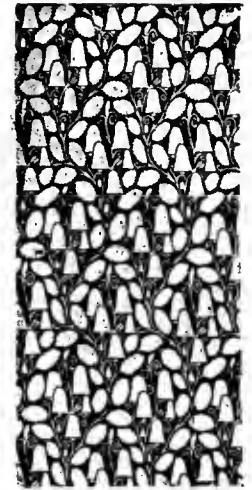
First step: Making a careful outline drawing. Second step: Creating an informal ornament with shapes selected from the first step. Third step: Making a bilateral or "twin" unit for an all-over pattern. Fourth step: Space-filling.

Backgrounds may be enriched by lines or spots, light upon dark or dark upon light.

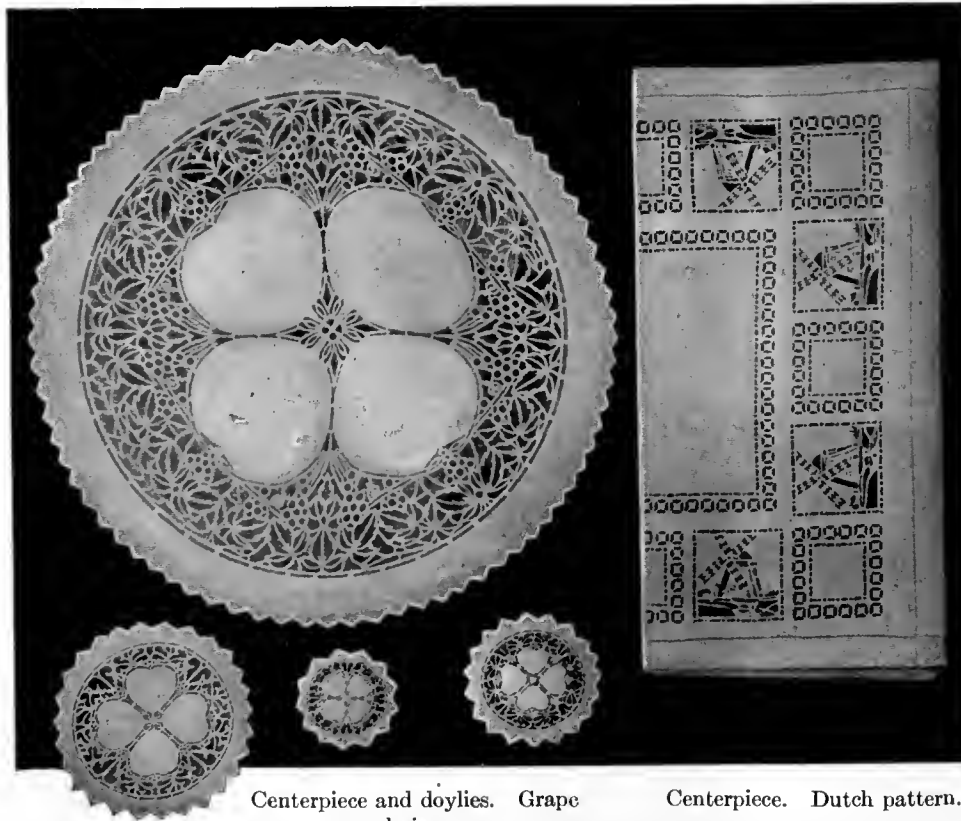
If the edges of the units seem too sharp against the

background color, the addition of a poster outline of intermediate tone will soften and refine the whole effect.

When there is too great contrast between the color of the unit and that of the background the intensity of either, of course, may be lessened. This is simple if black and white only are used. If, however, the design be in colors, the student must know how to reduce the intensity of the various colors. This information is given on pages 54, 55 and 58.



German textile.



Centerpiece and doilies. Grape design.

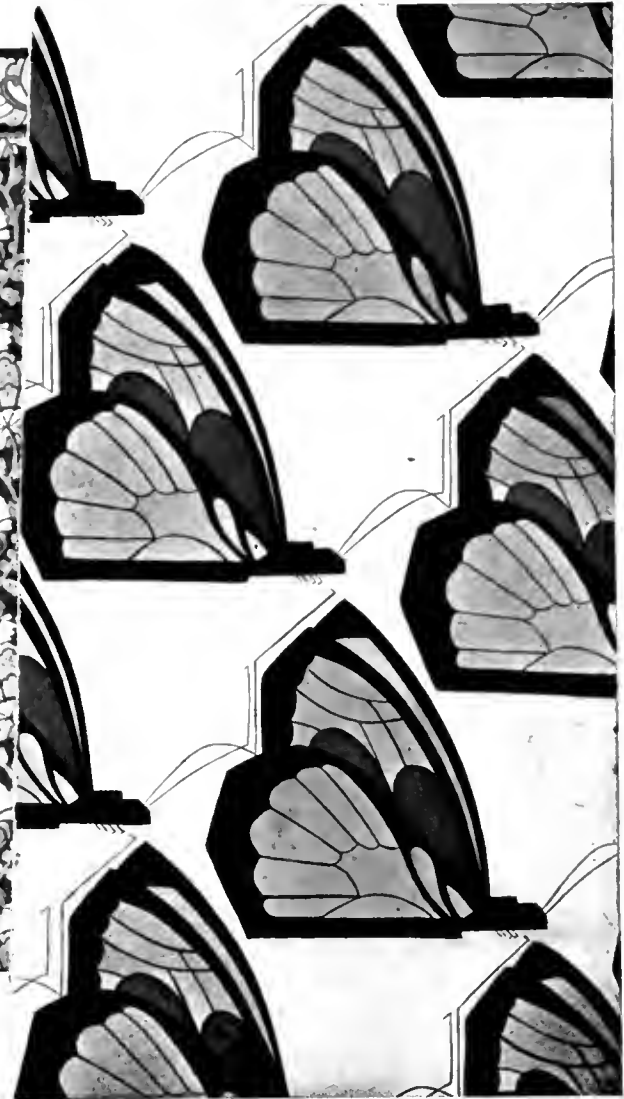
Centerpiece. Dutch pattern.



Chrysanthemum design for centerpiece.

Patterns from stock of James McCutcheon & Co. showing the character of designs in use for fine linens. Notice contour of background spaces in doilies.



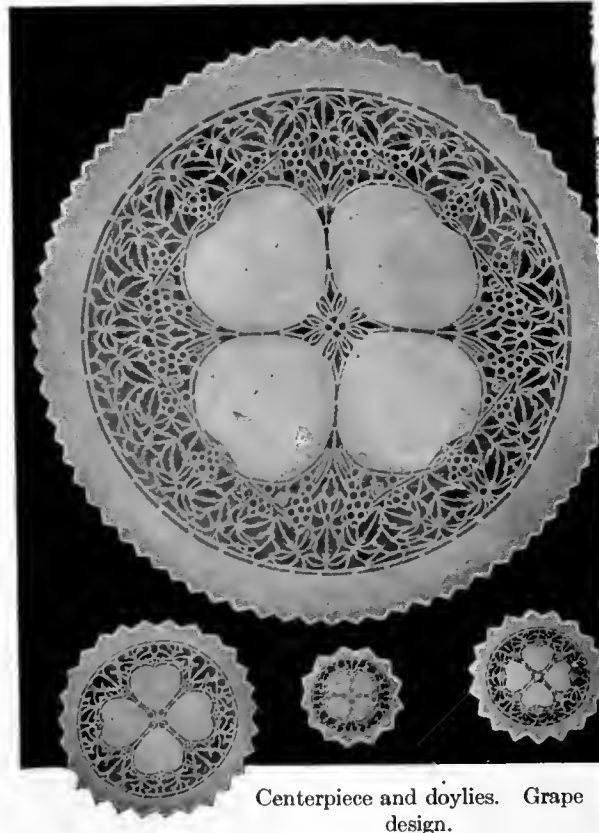


Three recent wall paper designs.

Work of first-year student, E. M.

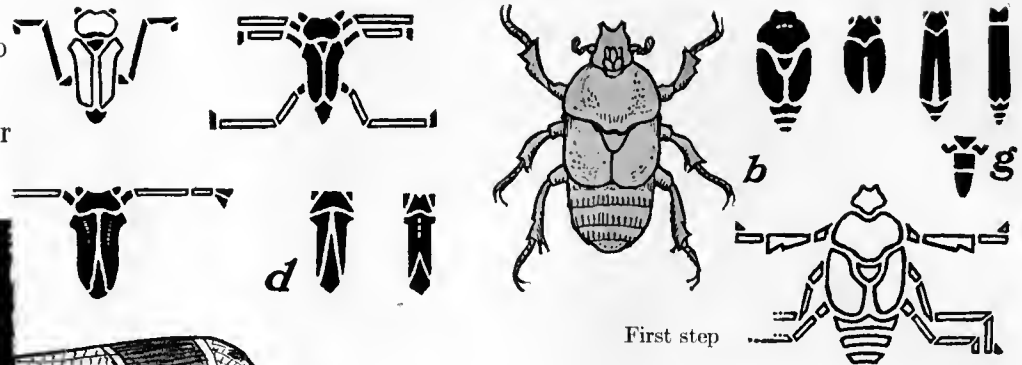
Backgrounds may be enriched by lines of  
upon dark or dark upon light.

If the edges of the units seem too shar



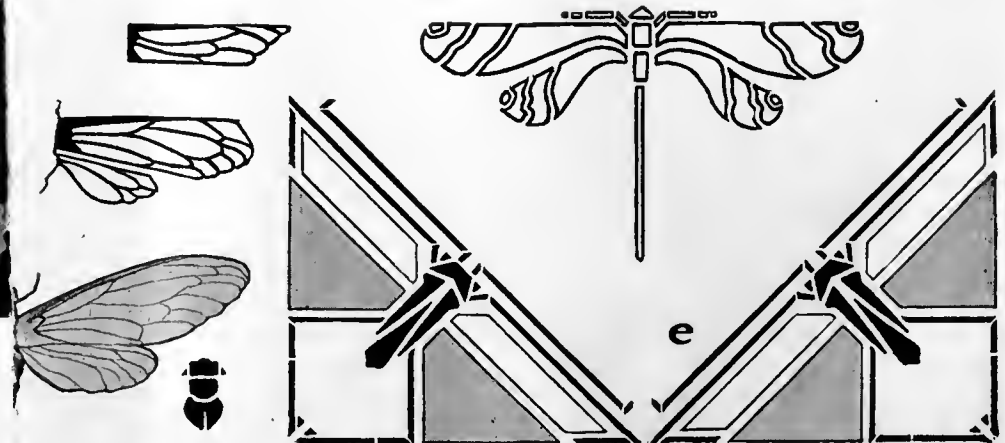
Centerpiece and doilies. Grape design.

Patterns from stock of James McCutcheon & Co. showing



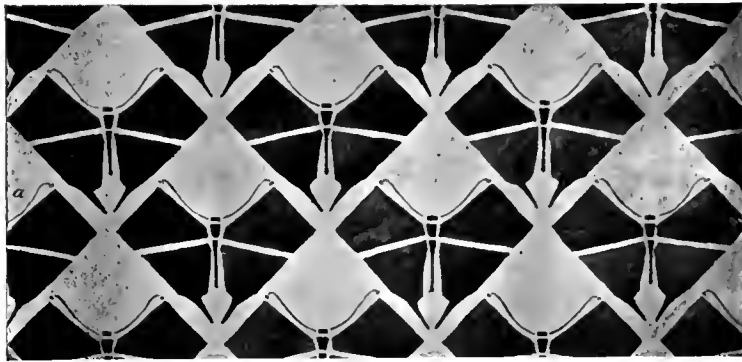
The circular border-pattern *f* makes use of the conventionalized body *g*. The corner decoration *e* uses the conventionalized body *d*, as does the all-over pattern *c* on the next page.

Except in the case of butterflies it is understood that insect-patterns will not indicate any particular species.

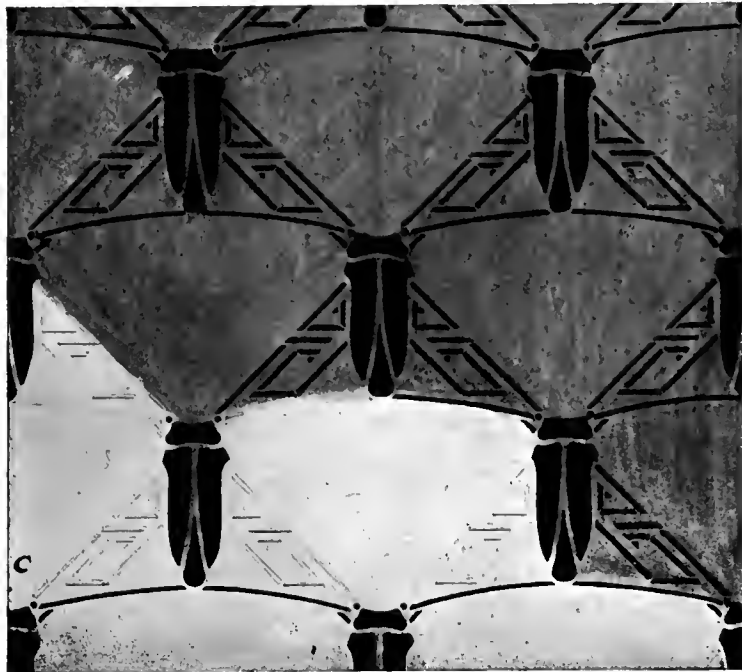


Principal shapes contained in the photograph. Second step: Utilizing a selection of the shapes for decorations for table-mats, table scarfs, trays, book-rack ends, lamp shades, blotter corners, etc.,

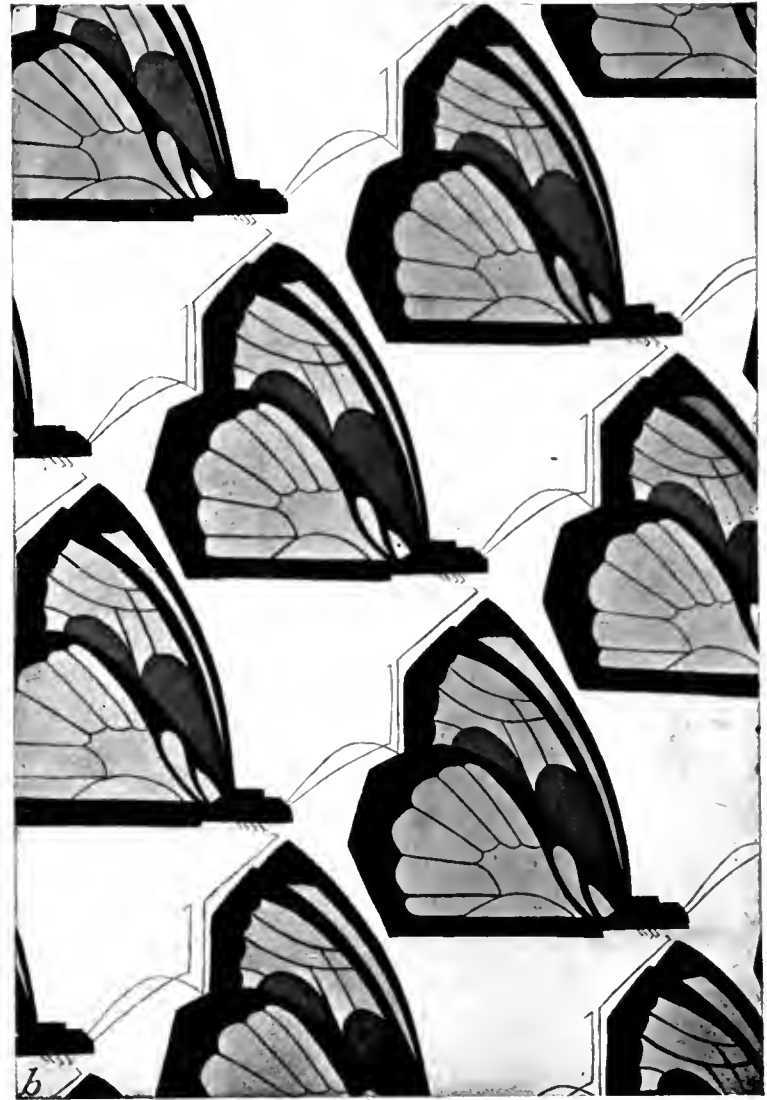
# INSECTS AS A SOURCE OF CONVENTIONALIZED MOTIVES



Work of first-year student, H. H.



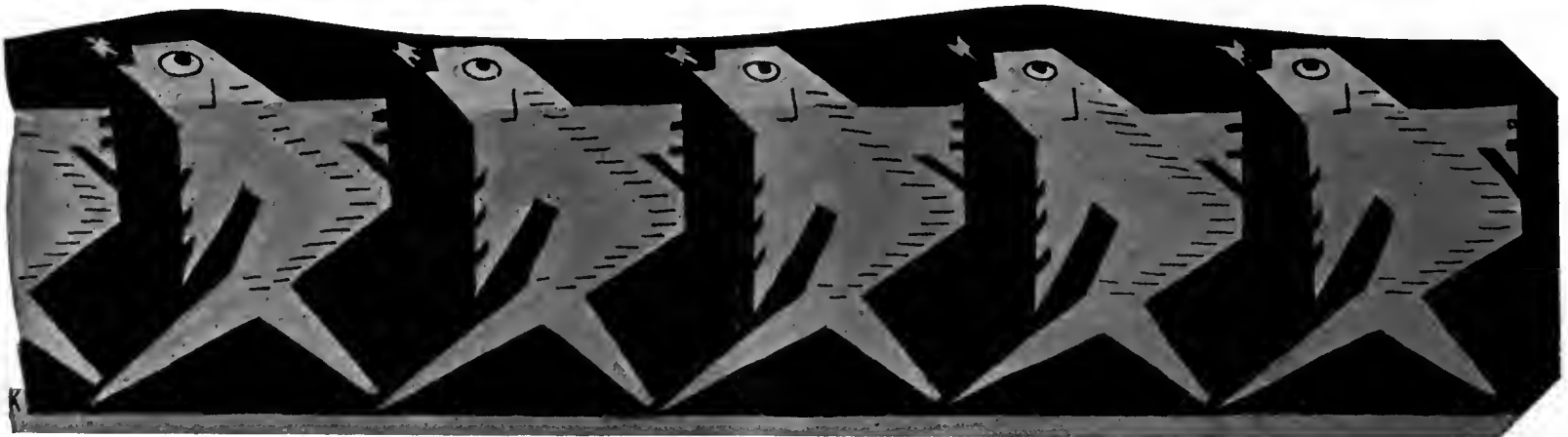
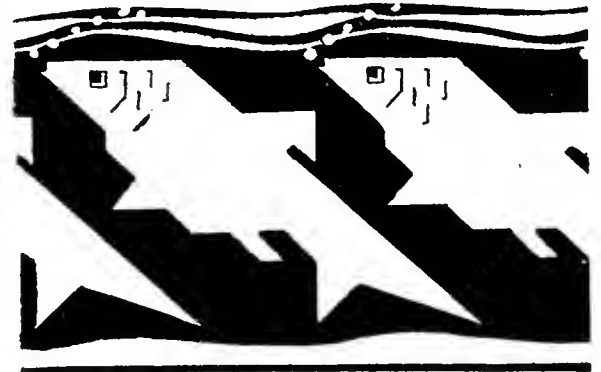
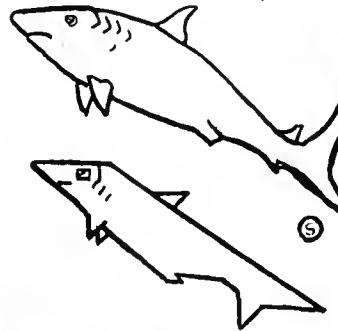
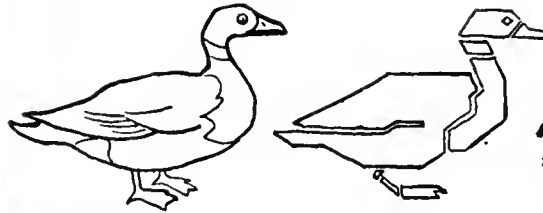
All-over pattern using motive *d* on preceding page.



Work of first-year student, E. M.

# ANIMAL LIFE AS A SOURCE OF CONVENTIONALIZED MOTIVES

## WORK OF FIRST-YEAR STUDENTS

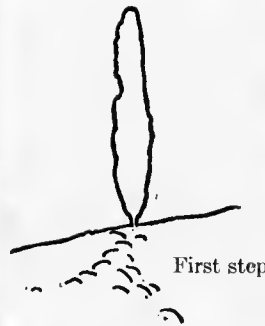


Japanese artists have given us many and beautiful examples of conventionalized motives derived from animal life. Ernest A. Batchelder has laid stress upon this exercise and encouraged the "Play impulse" by numerous excellent animal conventionalizations.

ANIMAL LIFE AS A SOURCE OF CONVENTIONALIZED MOTIVES  
WORK OF FIRST-YEAR STUDENTS



# TREATMENT OF LANDSCAPE MATERIAL FOR POSTER PROBLEMS



First step



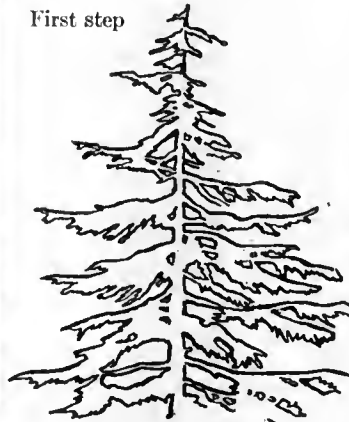
First step: Making a careful outline drawing of the shapes contained in the photograph (from the painting by W. E. Osborn).

Second step: Utilizing a selection of the shapes acquired in the first step, to produce designs for book covers, catalogue covers, headings, initial letters, tail pieces, etc.





# MAKING USE OF LANDSCAPE MATERIAL FOR POSTER PROBLEMS



The  
Night  
Before  
Christmas

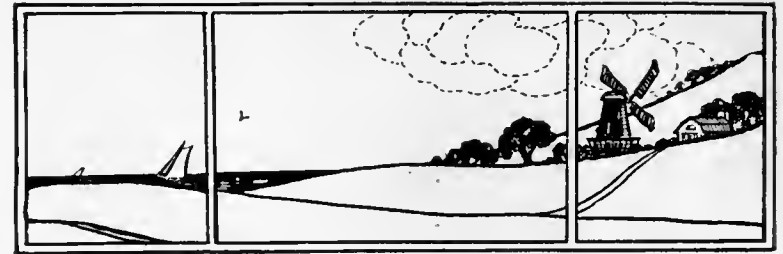
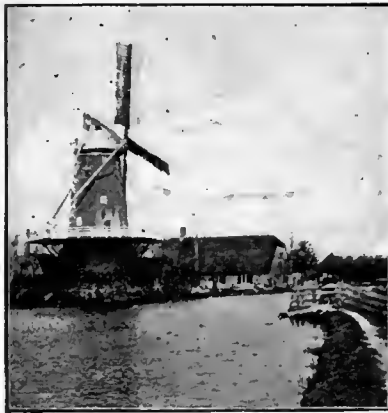


First step: Making a careful outline drawing of the shapes contained in the photograph.

Second step: Utilizing a selection of the shapes acquired in the first step to produce designs for book covers, catalogue covers, chapter headings, page headings, initial letters, tail pieces, "remarks" ("The Night Before Christmas"), etc.



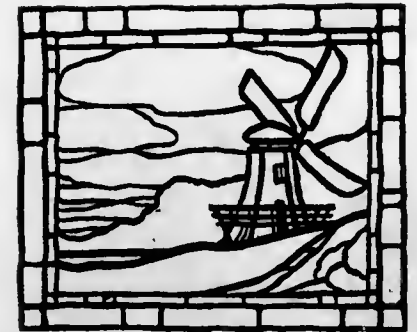
# TREATMENT OF LANDSCAPE MATERIAL FOR POSTER PROBLEMS



There are only two steps in the making use of landscape material for poster problems.

The first step consists simply of making an outline drawing of the shapes contained in the photograph. This is to insure a careful consideration of these shapes.

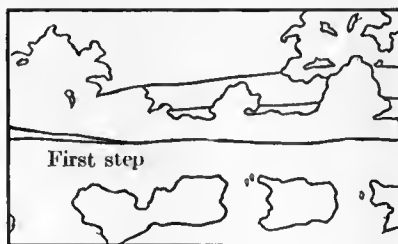
Any and all poster problems to which landscape material may be adapted are second steps. In this case the problems taken up are: A tailpiece, an initial letter, a heading, a design in three sections suitable for a heading or the upper part of a screen, a tile (stencil), a design for stained glass.





# TREATMENT OF LANDSCAPE MATERIAL FOR POSTER PROBLEMS

WORK OF FIRST-YEAR STUDENT, E. M.



The deciding upon a problem, the laying out of the space area to be utilized, the selecting of the most interesting shape or shapes, the careful arrangement for the sake of balance, the simplifying of mass forms by the leaving out of all or nearly all detail, the restricting of the variety of tones to two or three—all these considerations, and others dependent upon the particular problem in hand, go into the solving of a poster problem.

Ingenuity and invention play a large part in these poster problems.



## SECTION III

### LETTERING

20. *The importance of dignified lettering in effecting the sale of designs that require lettering, such as book and catalogue covers, title-pages, posters, book-plates, trade-marks, and advertisements, cannot be overestimated.*

The American designer has little use for any alphabets other than the "Roman" and modifications of the Roman, except in making advertisements. Page 32 shows this alphabet in its accepted classic form. The proportions of its letters and the selection of lines to be shaded or to be made thin are the outcome of centuries of experimentation and use. Other arrangements of the thick and thin lines have been often attempted, but without improvement upon the so-called classic examples.

Perhaps the most striking thing about these letters is their "typical squareness of outline."

The manner in which the Latin scholars held their pens is supposed to be responsible for the arrangement of thick and thin lines. The up-stroke produced a thin line, and the down-stroke a thick or shaded line.

Brown gives us the following **three rules** based upon the use of the pen for the **distribution of thin and thick lines**:

(a) Never shade horizontal lines.

(b) Always accent the sloping, down-strokes that run from left to right, including the "swash" lines, or flying tails, of *Q* and *R*; but never shade those lines that slope up from left to right, with a single exception in the case of the letter *Z*.

(c) Always accent the directly perpendicular lines, except those of the *N*, which seem originally to have been made with an up-stroke of the pen, and the first line of the *M*. On the round letters, the accents should be placed on the sides of the circle.

The little cross-stroke finishing the free ends of all lines of Roman capital letters is called the "serif." It gives uniformity and finish.

The middle horizontal lines of *B*, *E*, *F*, and *H* are commonly placed slightly above center, as are the junctions of *K*, and *X*.

The making of the letter *S* gives much trouble to students. The difficulty will disappear if the letter be constructed upon the numeral 8, thus:



The upper section of the letters *B*, *E*, *K*, *S*, and *Z* should be less in breadth than the lower section.

Although our alphabet is very different from the hieroglyphics of the Egyptians, we are probably somewhat indebted to their character-writing.

A small portion of our alphabet dates from a few hundred years B.C.

The type in use by the printers of the present day has two forms, a larger and a smaller, which in the printing offices are called "upper case" and "lower case." The upper case are the capitals, historically termed the "majuscule." The lower case are the small letters, more properly the "minuscule." Manuscript writers adopted the second form (minuscule) because it can be more rapidly executed and is more legible upon areas where much lettering is employed.

It appears that Charlemagne (crowned A.D. 800) did more than any one else to perfect lettering and make it

uniform. Lewis F. Day in his "Alphabets Old and New" tells us that it was through this emperor's influence that the Church of Rome employed scribes capable of developing the art of lettering. From the pens of these artists came the minuscule, or small letters. Up to this time the capitals only had been in use.

*M*, *D*, *C*, *L*, *X*, *V*, and *I* were generally employed to express numbers previous to the fifteenth century. It was then that the "Arabic" numerals, so-called, were introduced in Christian Europe. But except for the numbers 1 and 9, and the cipher 0, none of the numerals which we use are truly Arabic.

Just why hand-lettering should be employed today when printers' type is so nearly mathematically perfect is not always understood.



The first line is a hand-lettered title for a book jacket by A. W. Rushmore. The letters are made very close in order that they may be as large as possible within a specified width.

The second line shows the largest letters the printer could use in the same specified width. Notice how separated are the first three letters.

"ROMAN" LETTERS—CAPITALS, OR UPPER CASE

FREEHAND EXAMPLES

A A B C D E E F G  
H I J J K K K L M  
M M N N N O O P  
P Q Q Q Q R R R R S S  
T T W U V W X Y Z

*J.C.C.*

---

"ROMAN" LETTERS—SMALL, OR LOWER CASE  
FREEHAND EXAMPLES

a a a b b b c c d d e e e  
f f f g g g h h i i i j j k k k  
l l m m m n n n o o p p p  
q r r r s s s t t t u u u v  
w w w x x y y y z z z v

J.C.C.



An unusually distinguished title by A. W. RUSHMORE.

The hand-letterer can so arrange the spacing of his letters as to make his lines more easy to read and more uniform in effect.

The unyielding letters of the type-foundry very frequently come together awkwardly.

The letterer who is worthy of the name so constructs and so places his letters as to make, as nearly as possible, an equal distribution of space area between each two letters. This enables the reader's eye to run smoothly along the line without any interruptions except those intended to separate words and sentences.

Some of the best letterers, before "inking in" their letters, correct the pencilled letters as to proportion and spacing with the lettering turned upside down.

*The student must become thoroughly accustomed to the proportions of the letters of the Roman alphabet.*

Lettering must be (a) legible, (b) beautiful, and (c) dignified.

The "Old English" is a type of "black letter," but has gone out of use, except for infrequent decorative effects where legibility is not important.

**Old  
Hampshire  
Bond**

The unshaded alphabet here shown having all its lines of equal thickness, is called "Modern Gothic." The term

**LA  
LIGNE**

Eccentric Gothic.

"Egyptian" is sometimes applied to it, although it resembles Egyptian hieroglyphics in no point whatsoever.

Its proportions are those of the Roman. It might be called an unshaded Roman alphabet.

**Haut  
röte**

An advertising script.

O Q C G S

I D P B R

U J &

L T F E H

N Z M K

V A W Y X

1 2 3 4 5 6 7 8 9 0

Eccentric lettering is often effectively employed in advertisements (see Chapter on advertisements, page 49), but

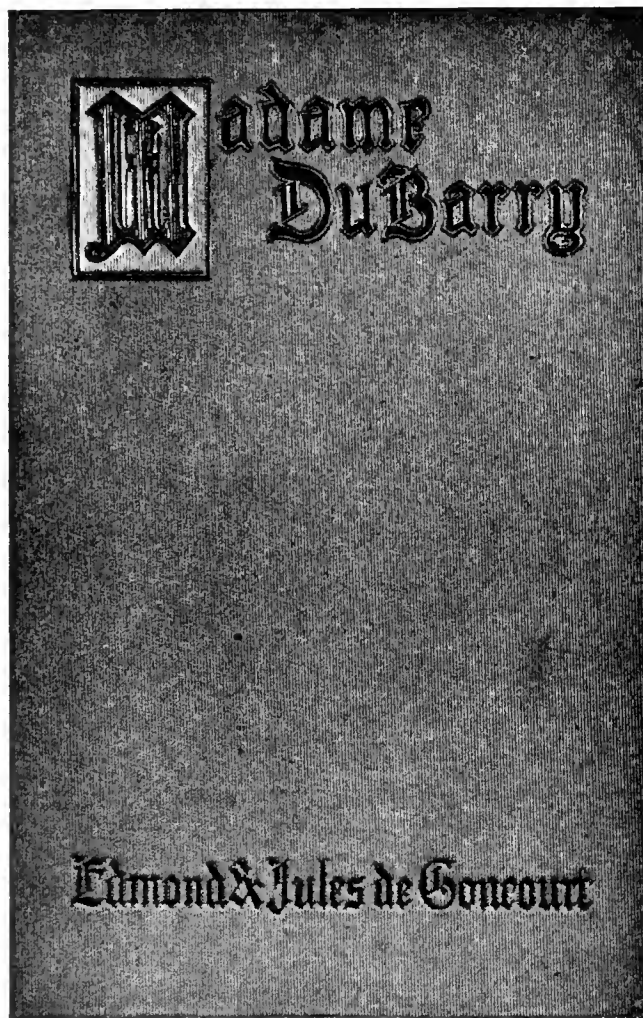
**Ce qu'on  
en  
pense**

Eccentric Roman.

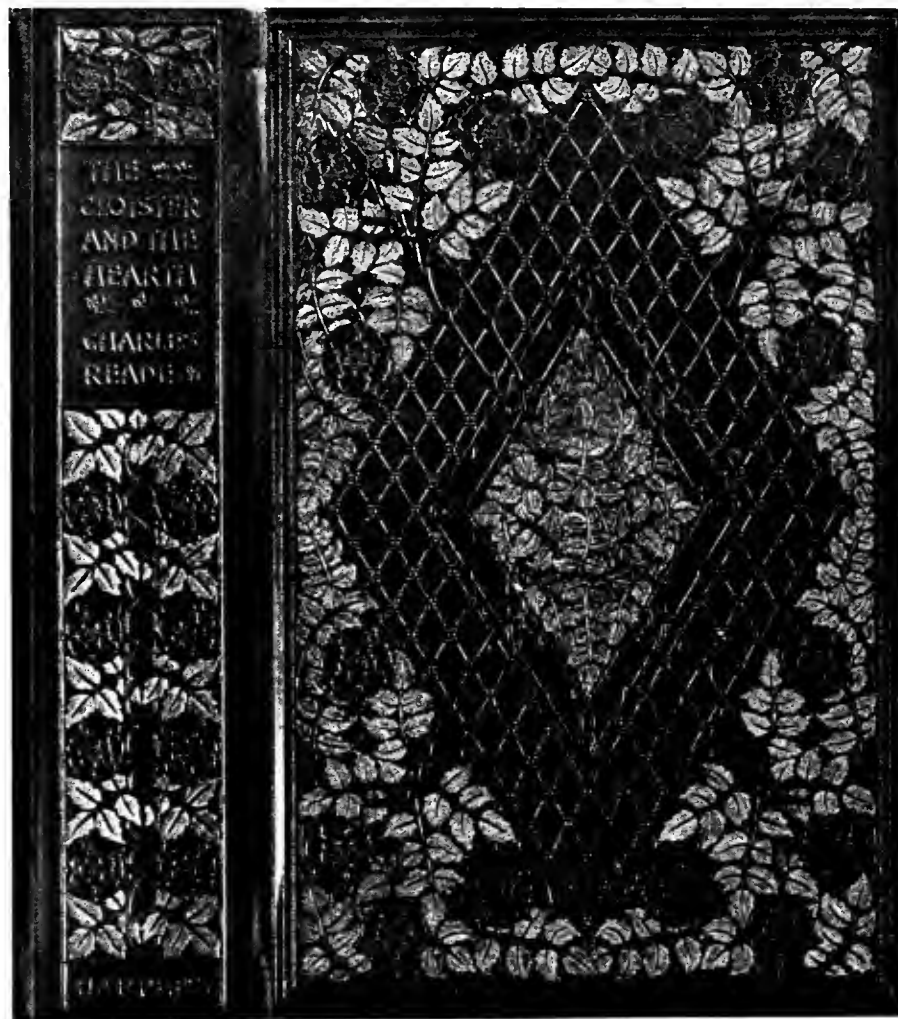
so used, is more or less caricature. Its very eccentricity frequently adds to the effectiveness of an advertisement.

**Kay-  
Seife**

One style of "black letter."



J. C. C. Initial of gold, vermillion, and black, upon olive green.  
Lettering black.



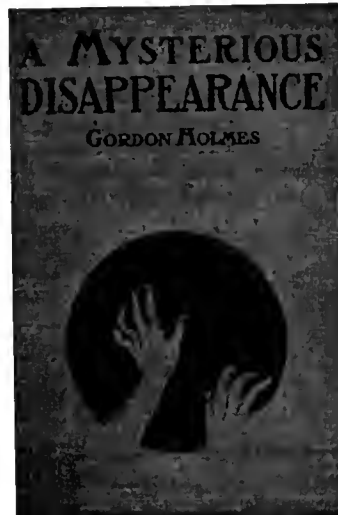
A. W. Rushmore. Imitation gold on medium blue. One impression.

Two examples of book cover designs for library editions.

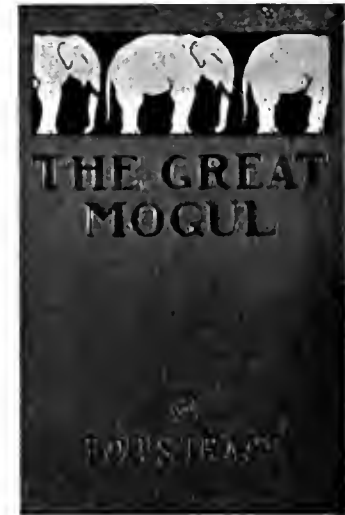




Cream leaf on green. Lettering dark green.



J. C. C. Two covers for detective stories. Black and red on tan.



Light blue leaf on medium blue. Lettering dark blue.

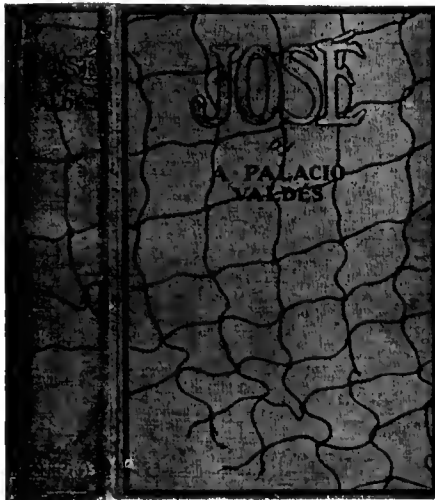
## BOOK-COVERS

21. The selection of a design. The designer who purposes to make a book-cover must know concerning that book two points which will determine the character of his design.

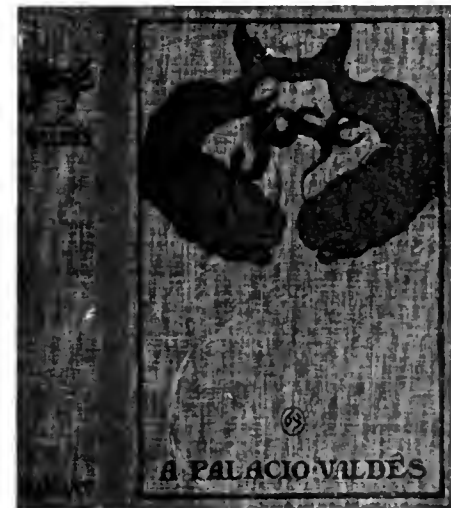
1st. Is the book intended for news-stand sale, or for a library edition?

2d. What is the story contained in the text?

The first fact can be ascertained from the publisher, and the second can best be learned by reading the manuscript of the book.



Black on tan. Title gold.



Gold on rose. Lettering black.

If the book is to be a "news-stand seller," the cover-design should be a striking poster-scheme, as simple in arrangement as can be devised, with lettering as evident and legible as lettering can be. Color-contrast is preferable to color-harmony because of its stronger appeal to the attention. The publisher is looking for a cover that will make his book the first to be noticed upon the book-stand. This type of cover is necessarily of simple design. No matter how exquisite may be the working out of a design, if it be at all complicated, its "news-stand value" is *nil*. This kind of cover ought to suggest definitely to the casual glance the character of the book itself, viz.: the detective story, the story of adventure on sea or in the deep woods, the historic romance, the story of sport, *ad infinitum*.

No experienced maker of book-covers would be willing to begin his design until he had become thoroughly acquainted with the contents of the book. Any stupid blunder on the

part of the designer will not be forgotten by the publishers. For example, a man who created a cover for "Pigs Is Pigs" and included in his design a clearly defined pig of the common farm variety might have discovered, had he read one chapter of the manuscript, or had he inquired of the publishers, that the story concerned guinea-pigs.

The designer who submits a cover for "In The Winter Woods" upon which he has utilized the graceful shape of the weeping willow, snow-laden though it be, makes himself ridiculous because the story concerns the Maine woods, with their evergreen-trees. A delicate pattern of lilies of the valley would be no more incongruous.



J. C. C. Black silhouette. Imitation gold on red. Two impressions.

Covers for school-books are in a class entirely by themselves. Those that are for the use of very small children may fittingly have more of the pictorial, while those for older school children may properly be treated with simple and more dignified schemes. Page 40 shows an example of a school-book cover for small children, and also a par-

ticularly good type of school-book cover for more advanced pupils.

If the book is for the library table, depending for its sale, not upon news-stand display, but upon its literary value and the acknowledged reputation of its author, then the designer's problem is entirely different. The color-contrast and poster-effect of the news-stand book are not wanted here, but rather color-harmony and the quiet treatment befitting the appearance of one about to step modestly into the library and shortly to take a place upon the shelves beside the best of literature. A design for such a book frequently consists only of well-planned masses of distinguished lettering placed in a dignified position upon book-cloth carefully selected.

It is evident that a design for the covers of a "set" of books must not suggest the contents of any one particular book of the set. Similar is the problem of the cover scheme for a book of poems. Flower-designs and

"all-over" patterns may be used for such books, but the number of cover-designs published with flower motives is astonishingly small.

The real demand is for cover-designs intended for book-stand display and sale. Recently, at the annual exhibition

of an art school, more than one hundred cover-designs were shown, every one of which was of the flower-pattern variety. It is unfortunate that so many students begin their professional work as designers of book-covers with no training to meet the actual demands of the market.

**22. Materials and Treatment.** When a design for a book-cover is made directly upon book-cloth it is best

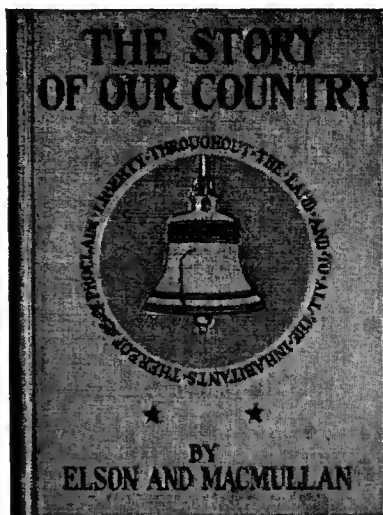


J. C. C. Light blue leaf on medium blue. One impression.

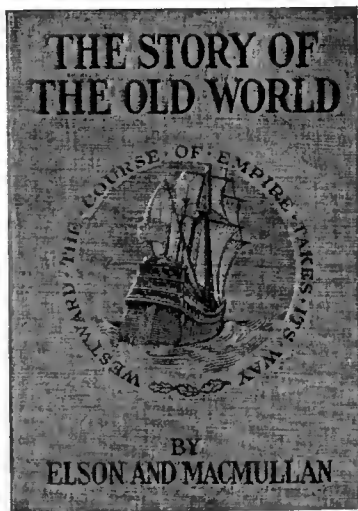
to make it of the actual size of the book itself.

Books of the size of the popular novel usually measure  $4\frac{3}{4} \times 7\frac{5}{8}$  inches. Therefore designs for such books should be made  $4\frac{3}{4} \times 7\frac{5}{8}$  inches, unless otherwise specified.

The "die cutter"—the engraver who from the original design produces the "dies" or "stamps" for printing



School-book. Dark green on medium green. Disc blind stamping.



School-book. Dark green on medium green. Disc blind stamping.

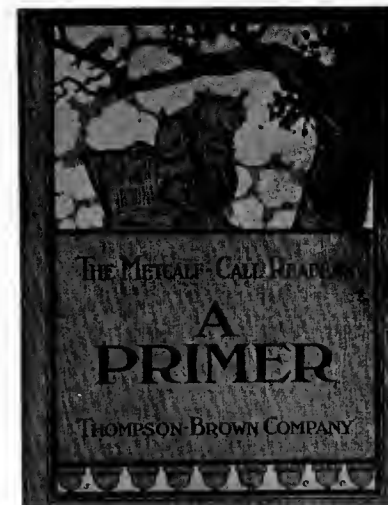
the covers—would have his work lightened and made more accurate if the designer would furnish, together with his design in color upon the book-cloth, a “black-and-white” (ink) drawing upon white Bristol-board, of the parts of the design which are to be printed in the dominant color. This ink drawing can then be photographed directly upon the metal, without the necessity of a tracing upon gelatine. This die, or stamp, made directly from the ink drawing is called the “key plate.”

As few colors as possible should be used, because each color necessitates a separate photographic reproduction and a separate stamping, or printing.

Gold-leaf measures  $3\frac{5}{8} \times 3\frac{5}{8}$  inches (“square”), or else  $3\frac{5}{8} \times 3\frac{7}{8}$  inches (“long”), although it can be bought in larger and therefore more expensive special sizes. If gold is to be used as one of the colors of the design, care should be exercised that the area of the parts to be in gold does not exceed the measurements of a single gold-leaf (less  $\frac{1}{8}$  inch all around), else the expense to the publisher will be greatly increased.

Imitation gold-leaf is not limited as to size and it is practical, effective, and economical.

When very light colors are used upon very dark cloth, it is customary to use instead of ink (which would require two or three successive printings to make it opaque) a variety of leaves, the Oeser leaf and others, that are manu-



Dark brown on tan. Clouds light cream leaf.



Lettering gold with white outline on red-brown. Vermilion and black illustration pasted on.

factured in very light tones. These are applied to book-cloth after the manner of gold-leaf. The cost of this material is much less than that of gold-leaf and its use upon a cover need not be limited in area as in the case of gold-leaf. This material is furnished in large sheets or leaves, and is like calcimine in sheet form. It is effective but is not very durable.

Clever designers make the most use possible of the color of the cloth in their color-schemes. The color of the cloth must be selected with this end in view, viz.: its usefulness as a part of the color combination. A sample book of book-cloths, showing the various colors, in plain finish, is a most valuable asset to the designer. From it, he selects the color of cloth



Earl Stetson Crawford. A cover for a library edition. The design beautifully suggests the content of the book.

upon which his color-scheme will work to greatest advantage. The number and maker of this particular color of cloth ought to be indicated upon the back of the completed design for the convenience of the publisher.

The design completed upon the chosen book-cloth should be presented to the publisher in the most attractive condition possible; usually surrounded by a mat of neutral gray, or mounted upon heavy card-board and precisely cut to the size of the book. It is well, in any case, to mount the linen upon heavy card-board before placing the design upon the cloth. Usually any of the manufacturers of book-cloths are willing to furnish professional designers with whatever cloths they may need in their

work. The Holliston Mills are particularly accommodating in this respect, not only to professional designers but to teachers and pupils as well.

Since the color of the cloth should play a part so important, the advantage to the student of working directly upon the cloth, not upon paper, is self-evident.

The salableness of book-cover designs is more assured if one be mindful of the popularity of certain colors with the publishers; these being green, blue, red, tan, and gray. Dark-colored inks upon light-colored cloths are safest. Blank or "blind" stamping is very effective and economical.

Opaque water color (tempera) is particularly adapted to use upon book linen. There are upon the market some so-called school tempera colors at ten cents a tube. The German colors of H. Schmincke & Company, Düsseldorf, and the American prepared colors of A. Bielenberg Company are satisfactory. So also is the large as-

sortment of the Prang Company. Some of the tempera colors—cobalt blue in particular—are inclined to powder and rub off. In this respect the Prang Co.'s blue seems safest.

When submitting to a publisher a completed cover-design which has been "ordered," it is often wise to show a second for the same book, either finished or in a partial state of completeness, to give him the psychological pleasure of exercising choice.

23. Mr. Edward Gorenflo, widely known as an engraver of book-cover dies ("die cutter"), is authority for the following table showing the cost of stamping (printing) book-covers, (and also for the diagram of accepted sizes of book frames.) A knowledge of the cost in which his design is involving the publisher is essential to the designer, and should always influence his color-scheme.

**Estimates of cost of stamping upon "Vellum" (smooth) book-cloth:**



Design by first-year student, M. K.  
Blue on light blue. Pale-blue leaf and gold.



Design by first-year student, G. A. S.  
White leaf and dark green on medium green.

Gold-leaf	{	\$2.00 per 100 leaves of standard	}	\$2.45 per 100 covers.
		"square" or "long" size,		
		.20 per 100 for "laying on,"		
		.25 per 100 for stamping.		

Ink, any color, 33 cents per 100 covers.

Oeser leaf, or other leaf-foil, including laying on and stamping, \$1.00 per 100 covers.

Blank stamping of cut without ink, 20 cents per 100 covers.



Cream and black on dark red.

Thus if a design requires one gold-leaf, one printing of ink, and one Oeser leaf, the cost to the publishers for printing will be:

Gold-leaf,	\$2.00	{	\$3.78 per 100 covers, for these three impressions per cover.
Laying on,	.20		
Stamping,	.25		
Ink stamping,	.33		
Oeser leaf,	1.00		

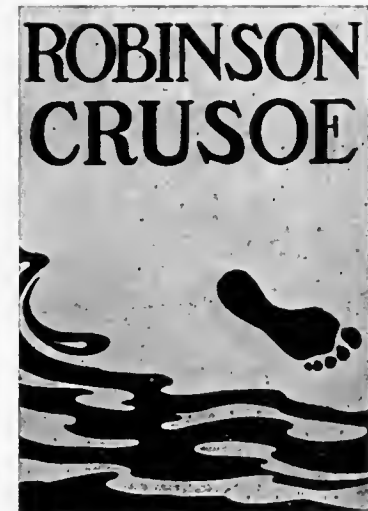
If the designer is wise enough to reckon with these comparative costs, and, by using the color of the book-cloth effectively, can produce a design requiring only one stamping, the cost of printing will be much reduced and his own popularity increased. For example, the one impression

for 100 covers using one gold-leaf each costs \$2.45. And the one impression for 100 covers using imitation gold-leaf or Oeser leaf is \$1.00. While the one impression for 100 covers using one ink stamping is 33 cents.

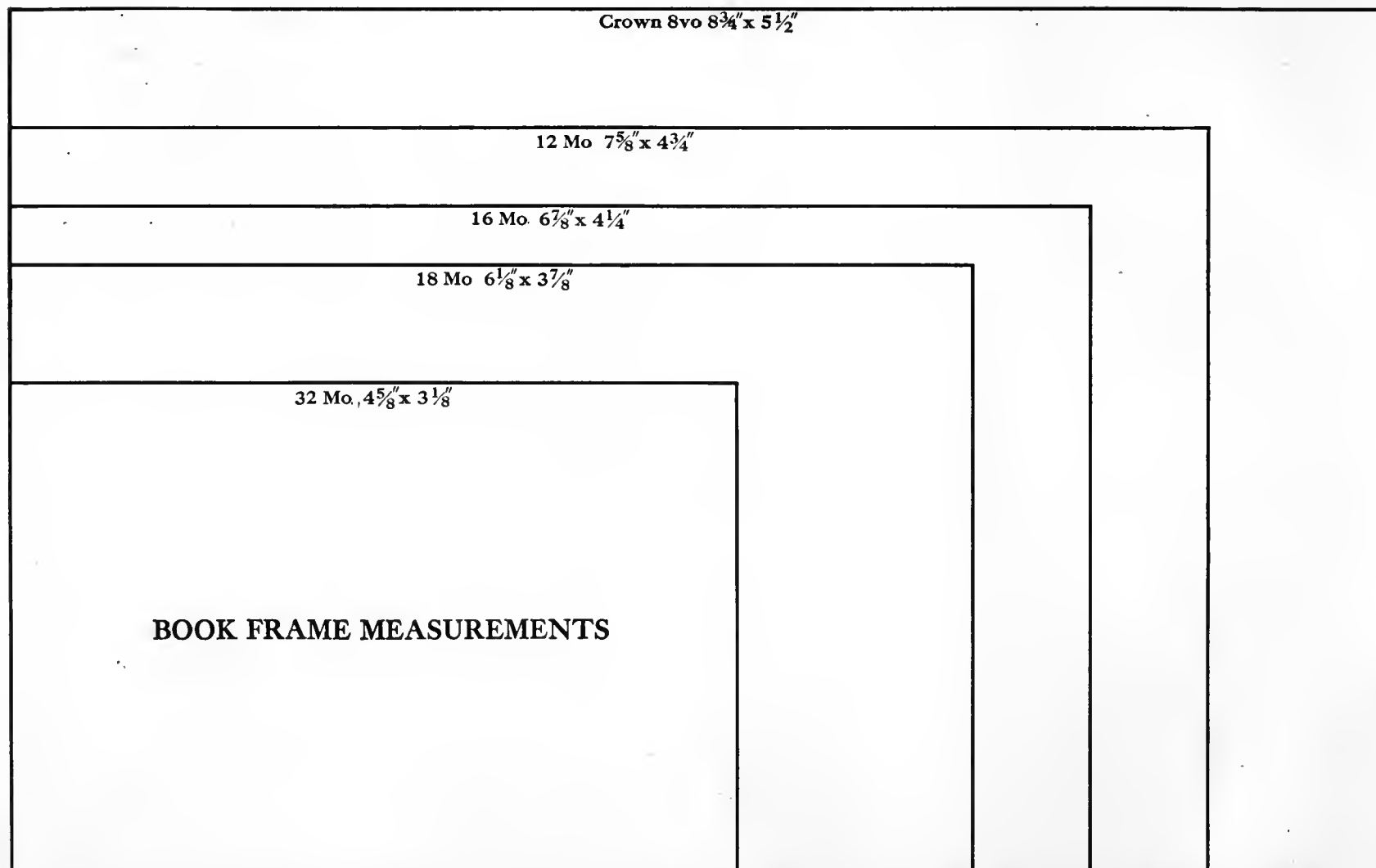
The designer who takes into account the foregoing facts has a tremendous advantage over the one who submits needlessly expensive and impractical color schemes.

By blank or "blind" stamping is meant the impression made by a die, or cut, upon the book-cloth when no ink is used in the printing. The die sinks somewhat into the book-cloth, giving it a polished and somewhat darker effect. This is shown in the reproduction of two school-book covers on page 40.

It is well to remember that the effects of transparent water colors are not to be attempted, as they cannot be reproduced in book-cover printing. The colors must be made opaque, compelling the designer to make use of flat poster treatment.



Black on tan.



The largest size frame, Crown 8vo, as given above, is also known as Large 12mo among American publishers. Sizes which vary slightly from these specified measurements take the name of the standard size next larger. For instance, any size between 16mo and 18mo is an undersized 16mo.



## BOOK PLATES

From the fifteenth century dates the use of imprints made from an engraved name plate, and affixed to a book (usually upon the inside front cover), indicating its ownership. Heraldic designs, together with the words *ex libris* and the name of the owner, form the traditional combination for book plates; but in these later times there have come to be many departures from the early established form.

The design may suggest the individual tastes and pursuits of the owner.

Several kinds of book plates are here shown of such a character as students may be called upon to create. The words *HIS BOOK* or *HER BOOK* frequently take the place of the words *EX LIBRIS*.



A. W. Rushmore.



Inverted color scheme.  
A. W. Rushmore's design.



Harold Sichel.



Harold Sichel.



Courtesy of Harper & Bros.

Book end-paper by A. W. Rushmore. The imprint on the right is that of Harper & Brothers. One half of an end-paper is pasted against the inside of the cover. The other half swings free.

## LIFE

By  
THOMPSON BUCHANAN

A novelization of the most spectacularly successful play New York has seen in years, making a masterpiece of American romance.

*Illustrated, \$1.25 Net*



EDWARD J. CLODE Publisher New York

## Betty-all-alone

By MEG VILLARS

She's a bewitching, frankly self-revealing little maid from the circumscribed life of a London suburb. A quixotic adventure in search of a husband—oh, she doesn't make any bones about that—lands her in Paris. Circumstances draw her very deeply into the risqué life of Bohemia. She flutters close about the fire and—why tell you the story? She does it so fascinatingly well.

Still in search of *the* man, she comes to America. Oh, you'll like her witty accounts of all our foibles. Fact is you'll be wishing you were *the* man. But—and there's another delightful part of her chronicle—she finds him, and he's just about all a fine fellow ought to be, if he measures anywhere near her estimate. *\$1.25, Net*

EDWARD J. CLODE Publisher New York

## BETTY-ALL-ALONE

By  
MEG  
VILLARS



\$1.25  
NET

CLODE

## BETTY-ALL-ALONE

by  
Meg  
Villars



CLODE

## Shorty McCabe On The Job . . .

By SEWELL FORD

Oh, he's back on the job, sure enough!

Let out your belt and laugh to your heart's content. He's a tunic of bubbling humor, a ray of sparkling good nature that would take the gloom out of an arctic winter's night.

*Illustrated, \$1.25 Net*



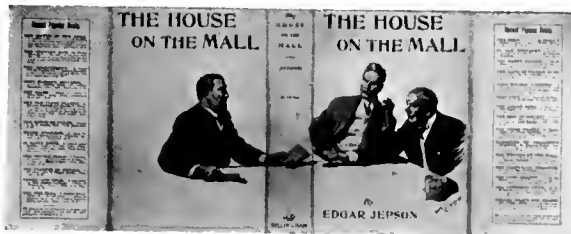
EDWARD J. CLODE Publisher New York

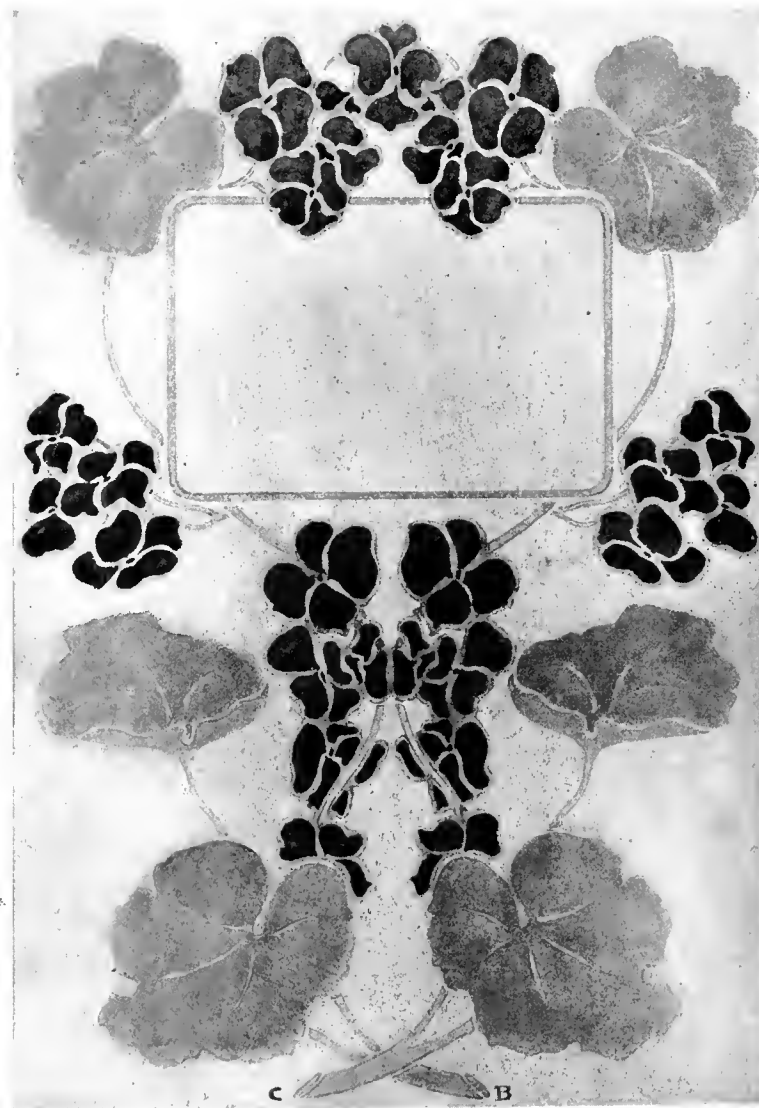
[ flap ] [ back ] [ Shelf back ] [ front ] [ flap ]

## BOOK JACKETS

The paper folders that wrap many of the books intended for news-stand display are called jackets. They protect the book, and should help its sale. Sometimes the design is identical with that of the cover itself. Frequently a jacket bears, besides the title and the author's name, much advertising text.

Often the design covers the entire length of the wrapper. When much text is used it is advisable to have the masses of small letters set with printers' type, and the title, the author's name, and any other display lines hand lettered.





Title Pages. Work of First-year Students.

## ADVERTISEMENTS

24. Worcester says advertising is "giving intelligence" (information). The modern advertising man says that Worcester's definition will not do unless this "intelligence" is given in a manner that will accomplish four things: (a) **attract attention**, (b) **arouse interest**, (c) **impress favorably**, (d) **create a desire for possession**.

Millions of people every day pick up a magazine or a newspaper, and simply glance through it. They are sampling it. The percentage of people who read advertisements at leisure is very, very small. The roving eye of the public must be attracted or the advertisement is wasted. Consequently a knowledge of how to make an advertisement as noticeable, as interesting, and as impressive as possible, is of the very greatest importance.

The public speaker has found that his information and advice are better received if accompanied by something that specifically illustrates his points. The advertiser must follow the same line of attack.

A scheme, or systematic plan, for the extensive advertising of a commodity is called a "campaign." Usually a "big idea" is determined upon; and, through all the

advertisements of the campaign, this idea is insistently proclaimed. The "big idea" may be conveyed by a catchphrase or by some peculiar pictorial figure intended to become inseparably associated with the commodity in the public mind.

There are still some advertisers who "run" a "pretty" picture without individuality or peculiarity in connection with too much text, and imagine that the combination is an advertisement. They belong to a past generation.

To be effective, an advertisement should have the smallest possible number of words, lettered, where hand-lettering is used, in a manner to excite optical interest, perfectly legible, and so placed as to be truly a portion of the design. The masses of the lettering should be not less considered than those of the pictorial part.

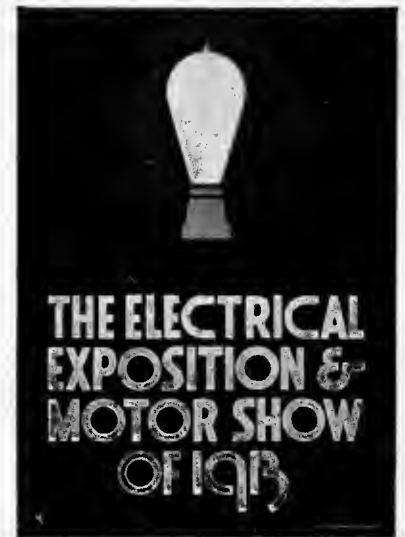
**Flat decorative treatment** of the picture part is vastly superior to the old-fashioned detailed photographic treatment, except in cases where the detail is necessary to show the features and characteristics of the thing advertised, as parts of machinery and samples of fabrics.



Three posters by F. G. Cooper.

**Simplicity and clearness** are of the utmost importance. This applies both to the text and to the picture. "The simplest thing, if adequate, is the best thing."

**Before beginning to design an advertisement** the designer must know its intended use. Is it for newspaper, magazine, street car, bill-board?



**25. Newspaper advertisements** must accommodate themselves to the limitations imposed upon newspaper photo-engraving by cheap wood-pulp paper, quick-drying ink, and fast printing. These limitations necessitate a "line-cut," or a very coarse screen "half tone." Blacks, when printed in a newspaper, will appear no darker than a deep, dingy gray; consequently black may be used freely in the making of the design. *Fine* pen-lines should be avoided, as they will either print more heavily than intended or "break down" on the cut and not appear at all in the printing.



**26. Magazine advertisements** are not subject to limitations so narrow. The coated paper and the finer grades of superpaper together with better ink permit of not only line-cuts but the finer screen half-tones. Solid blacks in magazine work must be more carefully considered, for, in the printing, they will appear nearly black and not gray.

The illustrator as well as the designer has a market in magazine advertising; but the poster effects of the designer have the greater possibilities.

**27. Street car and bill-board advertisements** require poster treatment, broad and colorful. Newspaper and magazine advertisements will be noticed at short range; but the street-car advertisement and the bill-board poster must "carry" effectively for a considerable distance.

**28. Dominance** is the most important principle in the designing of an advertisement. There is a main idea to be presented, and every inch of the advertisement must help to focus attention upon that idea. This emphasis



Poster by Walter Whitehead.



# ALRECO FABRICS

The Really Smart Color for 1915 is WHITE and the really authentic fabric is ALRECO.

*Do You Stock It?*

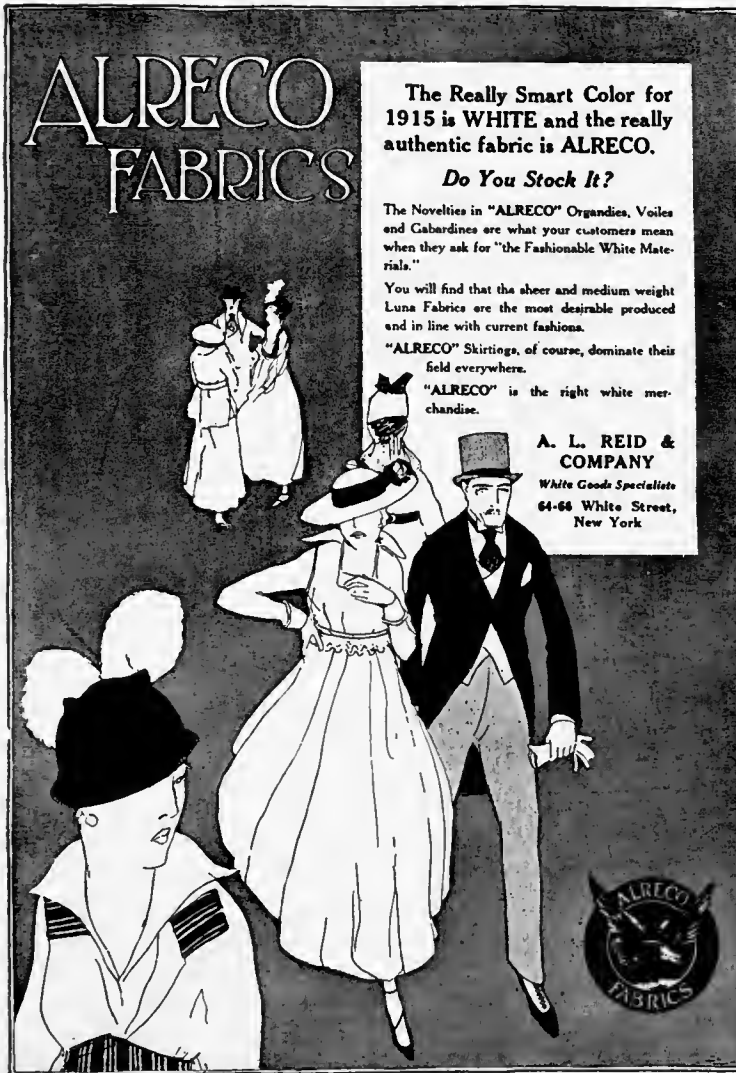
The Novelties in "ALRECO" Organdies, Voiles and Cabardines are what your customers mean when they ask for "the Fashionable White Materials."

You will find that the sheer and medium weight Luna Fabrics are the most desirable produced and in line with current fashions.

"ALRECO" Skirtings, of course, dominate this field everywhere.

"ALRECO" is the right white merchandise.

**A. L. REID & COMPANY**  
White Goods Specialists  
64-66 White Street,  
New York




**Follmer Clogg & Co.**

The season's leading French umbrellas and others

**Le MINARET**  
shown above

**THE PALM**  
shown at the left

and another beautiful pattern, just out

**THE ARCADIA**  
shown above

Also the

"TANGO" "EMPIRE" "SULTANA" and "CLO CLO SAN"

Always looking across the water for the latest in the "LAP" and "WAG" "FOLLIE" umbrellas for men and women.

**FOLLMER, CLOGG & CO.**  
147 FIFTH AVE., NEW YORK



**Francis**  
Blouses & Gowns

Two serious individuality which the elegant the rest from the ordinary together with a serious personality of the fashion, makes the showing of FRANCIS LTD a collection thoroughly out the world.

Born from the American, from South Africa, from Australia and Great Britain plants all the Francis available when in London.

Single garments styled in perfect elegance arranged at the best prices from the world's most famous.

**H. A. Francis, Ltd.**  
33 Great Theatrical Street  
Oxford Circus, W.

**London**



**FOUR MILLION**  
women will read about

One Piece

**WaterSprite**

Bathing Suits

as their favorite fashion customer this spring. The reason why we are making WaterSprite Bathing Suits is probable for the 1915. Exclusive, beautiful, and of the highest construction makes it one complete dealer selling to customers will certainly agree the goods. Low prices should drop in a point for samples and prices.

**Pelton & Pelton, 336 South Market St. Chicago**



**FOUR MILLION**  
women will read about

One Piece

**WaterSprite**

Bathing Suits

as their favorite fashion customer this spring. The reason why we are making WaterSprite Bathing Suits is probable for the 1915. Exclusive, beautiful, and of the highest construction makes it one complete dealer selling to customers will certainly agree the goods. Low prices should drop in a point for samples and prices.

**Pelton & Pelton, 336 South Market St. Chicago**



which we call dominance may be secured by (a) **position**, (b) **peculiarity of shape**, (c) **color**.

Drollery plays an important part in much successful advertising of inexpensive merchandise, as witness "The Gold Dust Twins" and "The Campbell Soup Kid," but should be carefully avoided in the advertisements of more costly merchandise, such as automobiles, clothing and furniture.

Advertising space is very expensive and must be utilized shrewdly, not by overcrowding, but often by sacrificing everything to the dominance of the main idea. For example, an automobile concern spends \$8,000.00 for one insertion of a double-page "spread" in the "The Saturday Evening Post," the advertisement containing a picture of the automobile and only fifty words upon the two pages.

Still another concern occupies the back page of "Life" simply with a picture of the automobile which it manufactures and one word, the name of the car.

Most advertisements are not effective.

Designers are in demand; but only those "arrive" who have fertile brains for the creation of advertisements by other means than weak pen-line illustrations.

Of course, a designer must be versatile—very versatile, indeed. Mr. A. wishes a four-sheet poster to proclaim the fact that his teas are best for the public. Mr. B. requires a trade-mark. Messrs. C. & D. are waiting for a street-car advertisement for pipe tobacco. And Mr. E. demands a haberdashery advertisement which will be equally suitable for bill-board, street car, magazine, newspaper, and even for a mailing card.

29. The **lettering of advertisements** is by no means limited to the "Roman" alphabet. We may employ our ingenuity freely, constructing letters with proportions old or new, dignified or eccentric, so long as we make them perfectly legible and in keeping with the commodity advertised. Obviously, perfumery advertisements may have lettering graceful and ornate, while an advertisement for traction engines calls for solidly constructed, weighty letters.

30. Whether an advertisement is made in black and white only, or in color, the **shapes of the background spaces** are equally important with the shapes of the masses of letters and the shapes of the picture parts.

31. The use of one additional color over two colors, obviously increases the cost of the printing-press work



A Wanamaker newspaper advertisement.

fifty per cent, and increases the cost of plates from fifty per cent to one hundred and fifty per cent, depending upon the kind of photo-engraving. It is evident then, that he who can produce the most effective advertisement with the use of the fewest colors is the designer most in demand.

The use of color is the easiest means of attracting attention, and in posters the designer has a wonderful opportunity to exercise his cleverness and inventive faculty. But to avoid offending the sensibilities of the public he must know the peculiar effects produced by certain colors and combinations of color.

There are **three primary colors**: red, yellow, and blue.

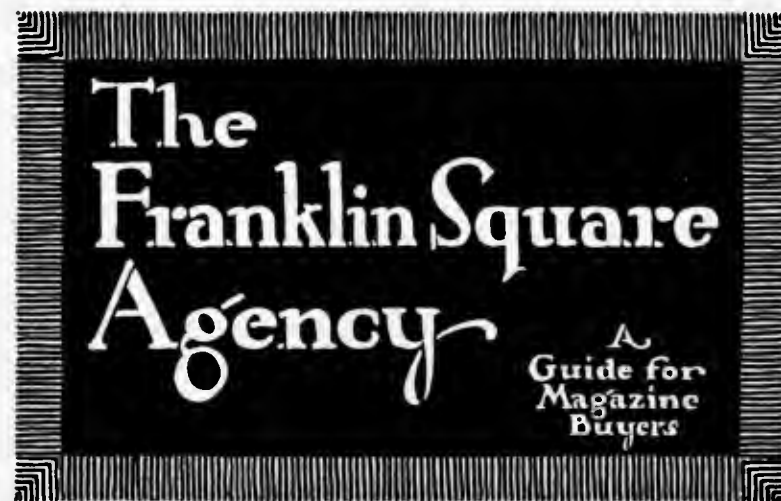
These are called primary because they cannot be produced by the mixture of any other colors, and because we produce the other colors by various combinations of these three.

The **complementary color** of each of these three primary colors is the combination of the other two. Thus the complementary color of blue is orange: orange being the combination of red and yellow. The complementary color of red is

green: green being the combination of blue and yellow. The complementary color of yellow is purple: purple being the combination of red and blue. (Color scientists refer to this color as violet.) By adding to one of the primary colors a portion of its complementary color, the pri-



J.C.C. Book poster. Three colors, yellow, blue and green. Two printings with Ben Day tones.



A. W. R. Eccentric Lettering.

mary color becomes grayed. Thus by adding orange to blue we acquire a blue which is more or less gray according as we have added much or little of the orange. On the other hand, if we add blue to orange we get an orange which is more or less gray, according as we have added much or little of the blue.

So in an advertisement if red seems too violent its complement, which is green, when mixed with it will subdue the intensity of its redness to a greater or less degree according as we add much or little of the green.

It is well to remember that a feeling of **color-harmony** can be easily given to the colors of a design by just a *little* mixing. For example, if red and yellow are the colors chosen for a design but are too sharp a contrast, just a bit of the red added to the yellow and just a bit of the yellow added to the red will bring about a greater refinement because the mixing process makes them blood relations.

The **three secondary colors** are none other than the three colors which have already been mentioned as complementary to the three primary colors. They are, then, green, orange and purple. The spectrum shows them appearing between the three primary colors, they being the combinations of each two adjacent primary colors.

# ILLUSTRATED BOOKS

Heavy-face Roman letters for a catalogue.



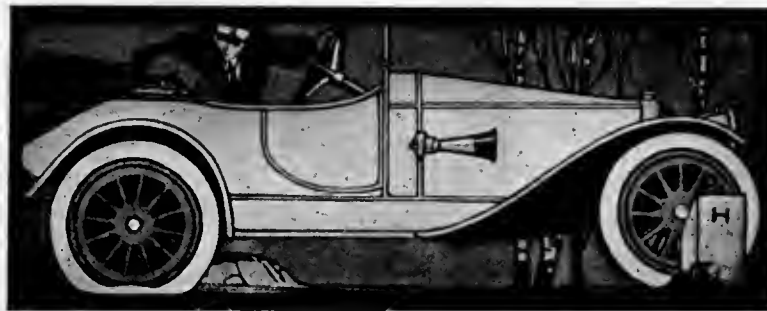
**Yellow** is the lightest color. It is estimated to be ten or twelve times as luminous as purple. Because of its great carrying power, it is particularly important in advertisements. It is excellent for backgrounds, especially

when somewhat lessened in intensity.

**Red** is aggressive, arousing, exciting. It seems to "jump at you." Consequently, it is seldom used as a background color, and when spread upon large areas it

has a particularly irritating effect. For small surfaces in a design, red is very valuable and wonderfully attractive to most people. When used discreetly, it gives increased commercial value to a design. A prominent designer has declared that he "would never think of making a magazine

cover without using red." Both the publisher and the buying public like it. When used in juxtaposition to black tones, red becomes less aggressive and sensational. Like black and purple, red has a tendency to make a surface appear smaller.

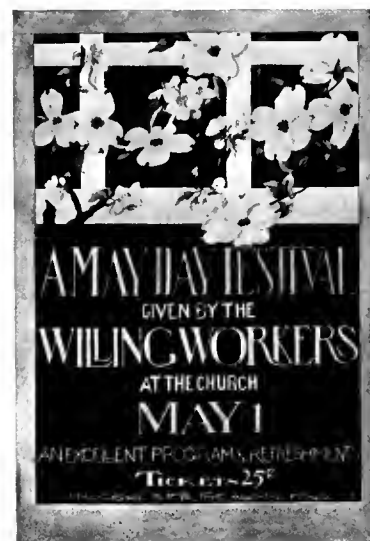


A poster advertisement for automobile tires.

POSTERS. THE WORK OF FIRST-YEAR STUDENTS.



S. F. Black background, hair and lips light yellow, label on bottle red.



M. H. Blue, yellow and green.

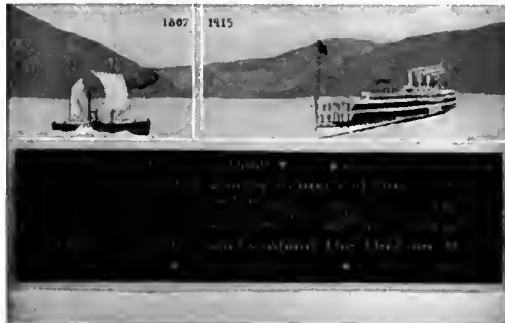


E. M. Yellow and brown.

POSTERS. THE WORK OF FIRST-YEAR STUDENTS.



E. J. White and yellow on brown.



C. B. White and red lettering on black.  
Scenery in tones of blue.



E. K. Yellow ground, rose color dress, black furs.



E. M. Yellow background and stripes, shoes dark brown with yellow highlights, small lettering black, large lettering white.



E. M. Brown background, white lettering.



V. P. Green background.



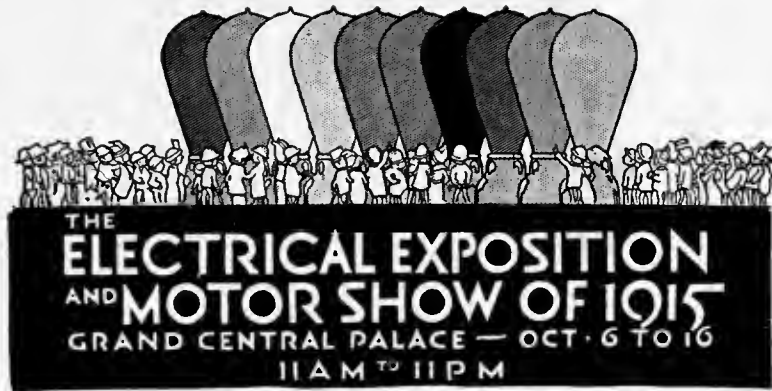
J. S. Brown and yellow on orange.



[G. A. S. Black and red on light yellow.



G. A. S. Yellow, green, and white.



**Orange**, being a combination of yellow and red, combines the characteristics of both in a modified degree. It is the glad color, possessing the light of yellow and the sprightliness of red. It can be used more freely than red.

**Blue** is the color nearest to gray in effect of formal refinement and coolness. When red or orange is being used, the addition of blue will cool the effect of their heat. This result, of course, may also be obtained by the use of gray. Blue has a tendency to make a surface appear larger.

**Green** is the summer color; the light of yellow combined with the coolness of blue. It is therefore restful and refreshing.

**Purple**, the combination of red and blue, is the darkest color, the color of shadows, and is poignant or refined in effect depending upon whether red or blue predominates

in the mixture. Being lowest in the color scale it may be used to suggest mystery and depth.

32. When black is added to a color, it produces darker tones of that color, which are called the **shades** of that color.

When white is added to a color, or when that color is thinned by the addition of water or turpentine, it produces lighter tones of that color which are called **tints**.

33. As to **materials and treatment for newspaper advertisements**, use black waterproof India-ink upon a white background in a manner capable of being reproduced by the line-cut process (see page 65). If a medium tone be desired in addition to black and white, a coarse "Ben Day" tone should be used whenever possible rather than a tone of wash, (see page 66).



Poster by F. G. Cooper. Two treatments for newspaper printing.

Gillot No. 303 is a good pen for small lettering and general pen-and-ink work. The crow-quill pens are flexible, but break easily and are inclined to spatter. For laying on solid tones of black, brushes are indispensable. Higgins' waterproof India-ink has long been popular. The Prang Company has an ink which seems thicker and possesses a very deep quality of black.

For magazine advertisements, not only pen-and-ink but "wash" drawings are used. Thinning out water-proof India-ink to make tones of wash is never satisfactory. Lamp-black water-color should be used upon a Bristol-board or illustrator's board of a surface slightly rough. Red added to black ink in a drawing intensifies the black so that in a half-tone reproduction the



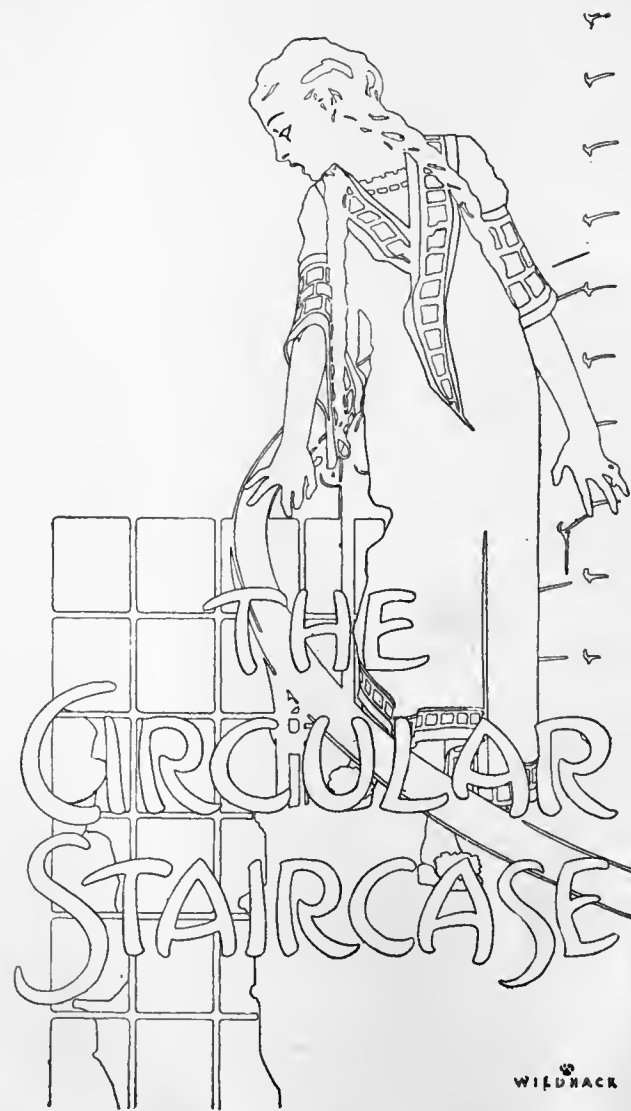
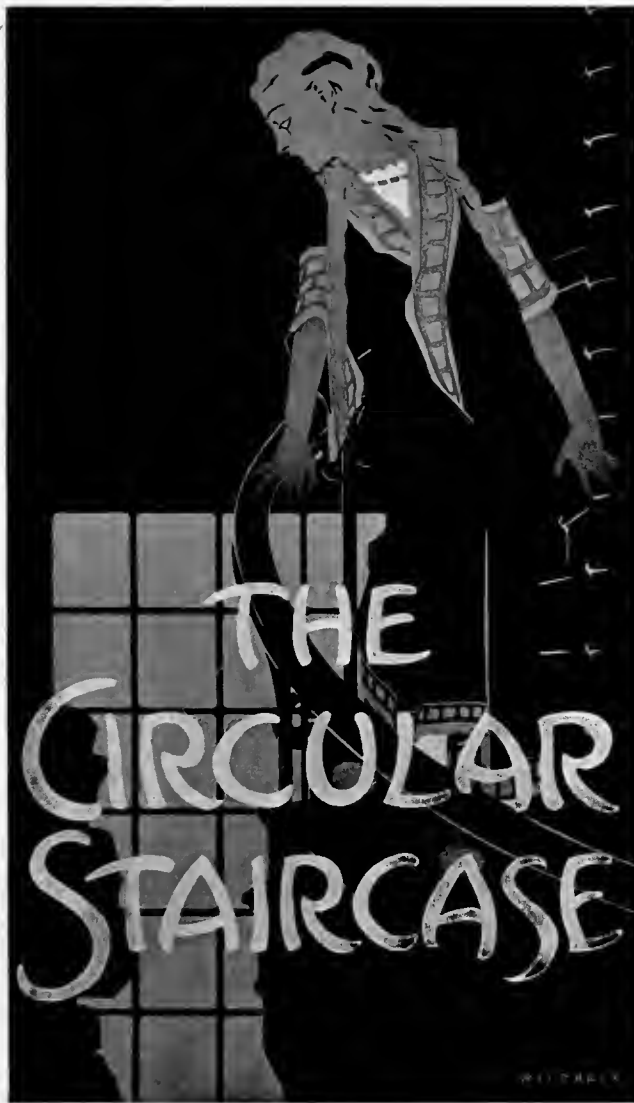
J. C. C. Poster for window-card display. Three printings with Ben Day tones. Yellow, blue and red. Key plate, blue. Horizontal band at bottom for "sniping" on of date. There are no standard sizes for window-cards.

blacks will be of a deeper tone.

Wash-drawings and paintings intended for half-tone reproduction should be strong in contrasts of light and dark, because delicate differences of tone will be lost in the photo-engraving process. Blacks become slightly grayed and whites also become slightly grayed; so that over-accenting in the original drawing is essential.

For colored advertisements for street-car and bill-board posters, oil colors are excellent, but their use requires a long training. The opaque water-colors in tubes (tempera) mentioned on page 43, are particularly useful and they require no special training. The customary soft water-color brushes are not suitable for applying tempera. The stiffer oil brushes are the right thing.





Book poster by Robert J. Wildhack. Three colors, using both solid and Ben Day tones. The half-tone is a reproduction of the finished printed poster. The outline drawing is not a pen-and-ink drawing, in the ordinary sense, but an ink outline indicating to the photo-engraver the outlines of masses. From this outline drawing the three plates were made, the Ben Day tones being applied by the photo-engraver, following the color scheme of a water color painting which accompanied the outline drawing. (See "Ben Day tones" on p. 66.)





J. C. C. Poster for a French furrier. Original in black and red oils, requiring two half-tone plates. Two printings.



Magazine cover with poster treatment by E. Deane. Four colors, red, yellow, blue, black, requiring four cuts with Ben Day tones. Four printings.



A twenty-four "sheet" poster by Louis Fancher. Painted in tempera, reproduced by lithography.

Large posters are printed in sections called "sheets." The following sizes are approximately standard:

1 sheet 28 in. × 42 in.	3 sheet 42 in. × 84 in.
6 sheet 84 in. × 84 in.	8 sheet 84 in. × 112 in.
12 sheet 112 in. × 126 in.	24 sheet 112 in. × 252 in.

Street-car poster by G. W. Harting. When street-car posters are to be reproduced by lithography, it is best for the designer to make his original the exact size of the intended reproduction. The regulation size is 11 in. × 21 in.



*Courtesy of Collier's.*

Two posters by Edward Penfield. Two printings, orange and black. These reproductions show only the black printing. The original drawing was in ink, with Ben Day tones suggested by number. Combinations of orange and black Ben Day tones produced brown tones.

# Collier's

5¢ a copy

THE NATION WEEKLY





A German type of poster produced by an American concern.

reproducing drawings or designs made with different mediums upon different surfaces.

Lithography and hand engraving upon wood and metal are not included in so-called photo-engraving. Photo-engraving consists rather of line-cuts and half-tones and combinations of them.



The business monogram of E. J. Clode, publisher.

It is essential for the designer to know the approximate expense of the various kinds of photo-engraving. It is as follows:

(a) Line-cut (see pages 6, 45, 46, 54,

## PHOTO-ENGRAVING

34. The term "Photo-engraving" indicates the process by which, from the original drawing or design, a "cut," that is an engraved plate, is made for printing photographic reproductions of that drawing or design. Different kinds of photo-engraving, varying widely in cost, are required to meet the demands of

70), 7 cents per square inch.

(b) Line-cut, with the addition of Ben Day tones (see pages 26, 52 ["Alreco fabrics"], 65, 67), 7 cents per square inch, plus varying expense of Ben Day.

(c) Half-tone (see pages 10, 20, 23, 36, 47, 64), 15 cents per square inch.

(d) Combination half-tone and line-cut, 15 cents per square inch for half-tone, plus 7 cents per square inch for line-cut, plus slight expense for making combination.

(e) Duograph—two half-tone plates for printing any two colors, 50 cents per square inch.

(f) Three color—three half-tone plates for printing three colors, usually red, yellow and blue, \$1.25 per square inch.

(g) Quadro color—four half-tone plates for printing red, yellow, blue and any other color (usually black), \$1.50 per square inch.



An Austrian poster.



35. In the making of **line-cut photo-engravings**, the drawing is placed in front of a camera and photographed. The size of the reproduction is determined by the distance to which the camera is removed from the drawing, and by the focus of the lens. Upon the ground-glass "finder" of the camera are linear measurements, horizontal and vertical, which enable the photographer to determine the desired distance. The negative is developed. The film is stripped from the camera-plate and placed reversed upon plate glass which is then locked in a frame against a zinc or copper plate, to insure close contact. The surface of this zinc or copper is sensitised after the manner of a camera-plate. When this is exposed to the powerful rays of a special arc light or "lamp," the light acts upon the metal surface through the film-negative, making a tracery or faint etching of the film's picture upon the metal, except upon those parts covered by the blacks of the negative.

After a proper time-exposure, the metal is "developed" by the use of acids which, eating upon the surface of the metal, develop the delicate etching into a deeper one. The parts that were covered by the blacks of the film-negative

are thus eaten or etched away, while the parts that were covered by the whites of the negative are left unaffected. It is the latter parts that receive the ink and show in the printing. The metal plate is mounted to make it "type high" and the "cut" is then ready for the printer.

Drawings and designs to be reproduced by the line-cut process must be made of *black and white only*. No intermediate tones are possible in the original, for in the reproduction they will appear black. All drawings and designs

that are to be reproduced in a smaller size should be treated with proportionately heavier lines, because, if the reproduction is to be, for example, one-half the linear measurements of a drawing, the lines of the cut will be one-half the thickness of those of the original drawing. Ordinarily, drawings to be reproduced by this process are made of a size one-quarter to four times greater than the linear measurements of the cut and always in the same relative proportions as those of the intended cut.

This is the cheapest of the photo-engraving processes. It is also the best fitted for printing upon coarse paper.

There are manufactured mechanical stencil patterns of great variety by the use of which tone effects may be given



to surfaces of line-cuts. Foremost among these mechanical devices are the **Ben Day tones**, so called from the inventor's name. The draughtsman upon his drawing indicates by number the particular Ben Day tone he wishes applied to a certain surface area of the reproduction. The engraver, following the directions indicated by number, applies that particular stencil pattern to the section indicated usually not upon the original drawing but more often upon the metal itself before the acid etching.

Many of the Ben Day stencil-tones closely imitate half-tone screens, while others give various effects of texture and material. If the application of Ben Day tones is complicated in the case of a particular drawing, it is well for the draughtsman to indicate upon that drawing the precise parts to be "Ben Dayed" by covering those parts with a wash of cobalt blue water-color in addition to indicating the stencil patterns by number.

This often gives to the original drawing a droll appearance, but vastly helps the engraver to carry out the real idea of the artist. Blue is the only color that will not "take" in the photographing under ordinary conditions; hence its use for this purpose of indication.

**36. Half-tone reproduction**, for the most part, is identical with that of line-cuts. In front of the film in the camera, however, there are placed two screens so ruled at opposite angles that together they form tiny squares by the crossing of their very

fine lines. As a result the surface of the photograph upon the film is divided into tiny squares because these screens are photographed together with the drawing. When the surface of the metal is being etched by the appli-

cation of acids, the tiny squares produced on the film and therefrom upon the metal are variously affected by the acids, some being etched away more completely than others. This difference depends upon the



Work of first-year student, G. A. S. !



A page-heading for a catalogue.

amount of light that penetrated the film at each individual square while the metal with film against it was exposed to the rays of the heretofore mentioned arc-light. The squares that are least etched away receive the most ink and print the darkest.

These half-tone screens are of different degrees of fineness, ranging from sixty lines per linear inch to two hundred. The finer the screen the greater the amount of detail and varying tones possible of reproduction.

Coarse wood-pulp paper and thickened quick-drying ink used by newspapers, require the coarsest screens. Better paper stock and better ink permit of the finer screens. The half-tones in this book are made with screens of one hundred and seventy-five lines to the inch. With the sixty lines to the inch screens the little squares are plainly visible, whereas with the one hundred and seventy-five to the inch screens the delicacy of detail reproduced approaches much more nearly that of the original drawing.



A change of address announcement by Stacy H. Wood.



## SECTION IV

### PROBLEMS

These problems in decorative design have been propounded by the **Board of Regents** of the State of New York in their examinations.

The list comprises all the problems in decorative design that have been used by them in the past several years, and practically all the types of problems that are likely to be used under the present systems of teaching.

The list is here given because it shows the wide range of subjects that the study of decorative design is expected to em-

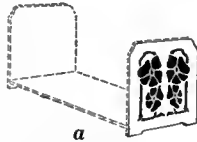
brace, and because its consideration may prevent students from pursuing a few types of problems to the exclusion of the others.

The numerals printed after a problem indicate the page upon which may be found a design of a character called for in the problem.

The accompanying miniature illustrations suggest appropriate solutions of a few problems not provided for elsewhere in the book.

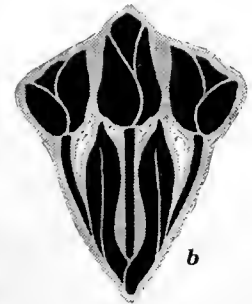
#### THEORY OF DESIGN—PROBLEMS

1. State and illustrate three fundamental principles of design (page 8).
2. Define "fitness to purpose" (10).
3. Define (a) balance (8), (b) rhythm (8), (c) symmetry (5), (d) radiation (6).
4. Define and illustrate (a) constructive design, (b) decorative design (3). (Accompanying cut of book rack illustrates both *a* and *b*.)
5. Give an example of a geometric radial unit (7*d*).
6. Make a conventional unit of (a) tulip (68*b*), (b) morning-glory, (c) buttercup.
7. Show all the steps in the development of a surface (all-over) pattern from a plant form (steps on page 12 and patterns on page 4).



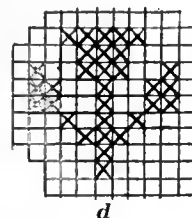
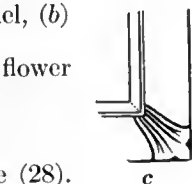
#### PROBLEMS OF HOME DECORATIONS AND FURNISHINGS

8. Surface (all-over) pattern for printed cotton goods (23*b*).
9. Surface (all-over) pattern, using butterfly motive (23 *a, b*).
10. Border of (a) animals (25), (b) fish (24), (c) insects (22*f*).
11. Wall paper border, stencil pattern (bottom of pages 9 and 18).
12. Window curtain border, stencil pattern (16*a*).
13. Tile (a) flower motive (7*c*), (b) landscape motive (28), (c) monogram motive, (d) geometric motive (7*d*).
14. Book rack end, flower motive (68*a*).





15. Flower motive for carved wood, (a) panel, (b) corner of picture frame (69c).
16. Design for cross-stitch embroidery, flower motive (69d).
17. Design for leather top of footstool (69e).
18. Panel in three sections, landscape (28).
19. Design for stained glass window, landscape (28).
20. Bowl, border design using rectangular forms (69f).
21. Vase for (a) long stemmed flowers (69g), (b) short-stemmed flowers (69h).
22. Border of butterfly or insect motive for (a) leather table mat (22f), (b) plate, (c) metal tray.
23. Border of flower motive for tray of pierced metal (69n).
24. Design for plaid.
25. Table runner (table throw) (table scarf), stencil pattern.



#### ADVERTISING PROBLEMS (see page 49)

26. Posters for tennis match, hockey game, cross-country run, ball game, flag day, school exhibition of drawings, "Jepson's Teas," "John Brown and Co., dealers in trunks."
27. Advertisement for "New Shapes in Ruby Pottery."
28. Label for canned peaches or other fruit (conventionalized).
29. Page border with initial letter for advertisement.
30. Own name lettered within rectangle using Roman letters (32).
31. Lettered sign "To let, apply within."

#### HISTORIC ORNAMENT PROBLEMS

32. Draw (a) an Egyptian lotus (70), (b) Greek anthemion (70), (c) fleur-de-lis (69i).

33. Design a square tile with lotus motive (70).
34. Within a circle compose design using some historic motive (70).

#### BOOK DESIGN PROBLEMS

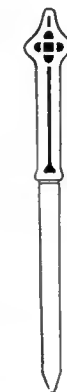
35. Book-cover for (a) "Emerson's Essays" (36), (b) book on the Civil War (40), (c) "Nature" (42, 48).
36. Note book for "History" (40).
37. Cover for school report.
38. Program cover.
39. Page border with initial letter.
40. Book plate, (a) monogram motive (45), (b) any motive (45).
41. Initial letter, landscape motive (29).
42. Heading (headpiece), panel in three sections, landscape motive (28).
43. Tailpiece, landscape motive (29).
44. Heading for (a) dramatic section of school paper, (b) athletic section.
45. Tailpiece for some section of school paper.
46. Monogram within circle, square, hexagon or kite form.

#### PERSONAL BELONGINGS—PROBLEMS

47. Scarf pin.
48. Watch fob, monogram (69k).
49. Hat pin (pierced metal).
50. School pin (pierced metal).
51. Belt buckle, (a) monogram (69k), (b) flower motive.
52. Napkin ring.
53. Blotter corner, animal or insect motive (22e).
54. Paper knife (69j).
55. Pendant (69m).
56. Escutcheon.



i



j



k



m



n

## HISTORIC ORNAMENT



Rosette,  
Lotus motive.



Border, lotus motive.



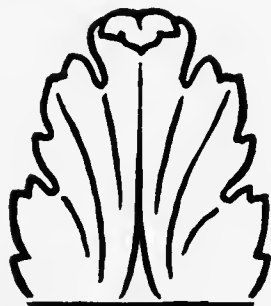
Scarabeus.



Border, lotus motive.



Rosette,  
lotus motive.



Acanthus.

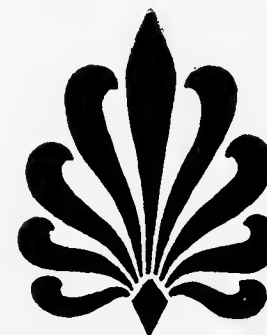
## GREEK



Border, anthemion motive.



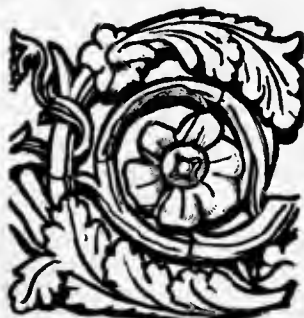
Egg and dart pattern.



Anthemion.

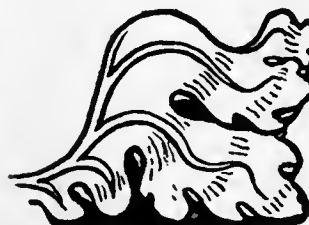


## ROMAN

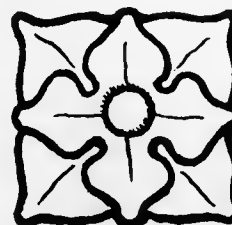


Scroll.

## GOTHIC



Crocket.



Rosette.

## SARACENIC



Border.



When certain styles of ornament have become identified with the architecture and general art of a race or nation they are called historic. Some of the historic styles are Egyptian, Greek, Roman, Byzantine, Gothic, Saracenic, and Renaissance.

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An interesting textile design by E. Williams.  
Motives derived from French 18th century textiles in the Cooper Union Museum.

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